

Land Use Application #749117 - Brown Bear - New Car Wash

Project Contact

Company Name: Barghausen Consulting Engineers, Inc.
Name: Caitlin Hepworth **Email:** chepworth@barghausen.com
Address: 18215 72nd Avenue South **Phone #:** 4252516222 7361
 Kent WA 98032

Project Type	Activity Type	Scope of Work
Any Project Type	Project or Site Plan Approval	Site Development Permit

Project Name: Brown Bear - New Car Wash

Description of Work: Construction of a Brown Bear Car Wash consisting of a 2,125 square foot tunnel wash with equipment room and a 27- by 20-square foot Auto Sentry canopy structure for unattended, point-of-sale transactions.

Project Details

Project Information

Use (s) - proposed	Automated Car Wash
Use - existing	Gas / Service Station

Critical Area Information

Critical aquifer recharge area

Clearing and Grading Information

Square feet of new impervious surface	1
Square feet of replaced impervious surface	13,125
Square feet of total impervious surface	13,125

Quantity and Size Specifications

Gross floor area of new nonresidential	2125
Gross square feet of proposed building	2125
Gross square feet of proposed structured parking	0
Maximum proposed building height	31
Number of buildings	2
Number of proposed new residential units	0
Number of proposed parking spaces	5
Property size in square feet	18402



PROJECT NARRATIVE

Site Development Permit - Brown Bear Car Wash

Prepared by:

Barghausen Consulting Engineers, Inc.

November 15, 2019

Assessor Map:	NE-28-24-6
Tax Lot No.:	8843500440
Zoning District:	Mixed Use
Comprehensive Plan:	Mixed Use
Site Size:	0.42 acres (18,402 square feet)
Address:	55 N.W. Gilman Boulevard
Location:	SEC – N.W. Gilman Boulevard and 1st Avenue N.E. Issaquah, Washington

1. Project Overview

The project calls for the construction of a Brown Bear Car Wash consisting of a 2,125-square-foot tunnel wash with equipment room and 27- x 20-foot Auto Sentry canopy structure for unattended, point-of-sale transactions. Additional site improvements will include freestanding and wall signage, asphalt paving and striping, new curb cuts, lot lights, perimeter landscaping, surface parking for five (5) vehicles, utility connections, and a vacuum station. The site is currently vacant after the recent demolition of the automotive service station.

The hours of operation for the car wash will be from 8:00 a.m. to 8:00 p.m. during summer hours and 8:00 a.m. to 7:00 p.m. during winter hours. The car wash will utilize an automatic conveyor system with an on-site attendant to help guide vehicles into the drive-through tunnel. The average wash cycle for the car wash is approximately ninety (90) seconds with the dryers operating for the last thirty (30) seconds of the cycle. From an operations standpoint, the car wash plans for a maximum service rate of 55 vehicles per hour (VPH).

2. Access and Circulation

Driveway access is proposed from the access roadway located abutting the north and east property lines of the project site. The access road provides direct access to 1st Avenue N.W. with a right-in/right-out onto Gilman Boulevard. The 1st Avenue N.W. connection also provides indirect access to Rainier Boulevard North to the west and Front Street North via connection to N.W. Holly Street located to the south of the project site. An exit only driveway is proposed onto 1st Avenue N.W. to provide an escape lane for vehicles in the drive-through lane that are not able to enter the car wash.

The car wash building will include a separated drive-through entrance that is accessed within the site upon entering the Auto Sentry on the south side of the car wash. The Auto Sentry will provide two (2) multi-media payment terminals that feature an intuitive user interface designed to create a better customer experience through the transaction process. A total of five (5) parking spaces will be provided with three (3) of the parking spaces designated for the vacuum station.

BARGHAUSEN CONSULTING ENGINEERS, INC.

18215 72ND AVENUE SOUTH KENT, WA 98032 P) 425-251-6222 F) 425-251-8782
BRANCH OFFICES: TUMWATER, WA KLAMATH FALLS, OR LONG BEACH, CA ROSEVILLE, CA SAN DIEGO, CA
barghausen.com

3. Traffic

TENW prepared a memorandum dated November 11, 2019 that documents the trip-generation estimate and queuing analysis based on data collected at a local Brown Bear Car Wash facility located in Sammamish, Washington. The analysis summarized that the two-day average weekday trip generation for the site is 679 trips and Saturday daily trip generation is 526 trips. The maximum queue observed was four (4) vehicles during the weekday and seven (7) vehicles on the weekend. The Preliminary Site Plan is designed to accommodate the anticipated maximum queue on site without creating spillover into the adjacent right-of-way.

4. Stormwater Concept

Water conservation and water quality are paramount in the design and operation of the Brown Bear car wash. The carwash facility will utilize a wastewater reclamation system consisting of three (3) 1,500-gallon wastewater reclamation tanks and an 800-gallon oil/water separator. The water reclaim system is designed to minimize the amount of fresh water required for each wash. It will also adequately treat all wastewater before it is discharged into the existing sewer main. Water passes through the water reclamation system to eliminate heavy materials; overflow and rinse water is routed through the oil/water separator before being discharged. This system is anticipated to provide adequate source control measures and protect stormwater runoff from pollutants.

The developed site hydrology will consist of a newly-graded site that will drain stormwater runoff into catch basins located onsite. Once collected within the catch basins, stormwater will be conveyed to a detention vault to meet flow control standards. Detained runoff will then be conveyed to an oil water separator followed by Bio Clean modular wetland facility to provide enhanced treatment. Due to the shallow depths of the existing public drainage system, detained and treated runoff must be pumped to a catch basin located on site and then discharged via gravity to the public stormwater system.

5. Architectural Design

The project site is located outside of the Central Issaquah Plan Area. The car wash building will feature concrete walls with blue, metal fascia and stone veneer along the foundation of the building. A tower element with a sheet metal, pitched roof will be incorporated on the east side of the building. The majority of the roofline will be flat and treated with a cornice across all sides of the building. The west façade of the building will incorporate window glazing with direct views into the car wash tunnel. The primary colors of the car wash building and canopy will include blue, white, and green striping. The Auto Sentry canopy will consist of metal fascia that is compatible with the architectural concept of the car wash building.

6. Sustainable Development

Pursuant to the City's handout on the vision for sustainable development, the project addresses the following sustainability criteria:

Standard	Requirement	Response
Site Management	Incorporate Low Impact Development (LID) strategies early in the design process to mimic pre-disturbance hydrologic processes.	LID measures are not feasible for the site because the site is located within the critical aquifer recharge area.
Water Efficiency	Use water more efficiently in buildings and landscaping.	Water is recycled in the automated car wash using 3 reclaim tanks. The landscape plan includes only low water use plants.

Transportation	Design for pedestrian and bike friendly neighborhoods: bike facilities (racks, showers), rideshare parking preferences and hardwire outlets for electric vehicles.	The project includes the construction of a sidewalk along the western property line on 1st Avenue N.W. The sidewalk provides bicycle and pedestrian access to the site.
Waste Reduction	Divert at least 90 percent of construction related debris through reuse and recycling	The project will implement best management practices for construction and will divert construction-related debris to recycling services.

While the project will not include green buildings, the project does incorporate elements of the City's vision of sustainability.

7. Purpose of Request

Site Development Permit

Pursuant to Issaquah Municipal Code Section 18.04.220, a Site Development Permit shall be approved if the following findings are made:

1. *The development proposal is consistent with the Comprehensive Plan.*

Response: The project adheres to the following applicable Comprehensive Plan policies:

Standard	Requirement	Response
Land Use	Ensure that all development is consistent with the City's vision through the implementation of the Land Use Code, critical areas regulations and other development regulations.	The site is located in the Mixed Use zone and permits auto washing services. The site is in compliance with the applicable development regulations as described in the table below.
Land Use	Maintain development regulations that promote compatibility between uses	The site was previously used as a gas station and convenience store. The existing site is immediately surrounded by retail uses, including a gas station to the east and to the north, an automotive service use to the south, and a veterinary clinic and drive-through coffee stand to the west. The project proposes an automated car wash and is compatible with the surrounding automotive-related retail uses.
Housing	Provide for and maintain the distinct characteristics and scale of existing traditional, suburban, and mixed use neighborhoods including the Urban Villages. Ensure neighborhood compatibility of infill development and redevelopment	The car wash will incorporate a tower structure along the roofline. The tower and roofline will provide a cornice. The car wash includes articulation features on the east façade for the office/utility rooms. The car wash includes large windows along the west façade for the washing tunnel.

Transportation	Require that all streets be Complete Streets, built to accommodate all travel modes in compliance with the City's design standards and plans for streets, bicycles and pedestrian facilities.	The project scope includes a new sidewalk along the western property line on 1st Avenue Northwest in accordance with City standards.
Utility and Public Service	Determine utility infrastructure necessary for a given development concurrently with site plan entitlement.	<p>The site is located on a developed parcel and existing utility connections are available.</p> <p>The project proposes to connect to the existing sanitary sewer main with a new 6-inch sanitary sewer stub. The existing 1-inch water meter will be converted for irrigation purposes. The project will require a new 1.5-inch meter to serve the car wash, which will connect to an existing main from either 1st Ave. N.W. or the access road to the north.</p>
Economic Vitality	Encourage clusters of complementary businesses.	The project is an automotive retail use. The site is surrounded by automotive related retail uses, including a drive-through coffee stand, two (2) gas stations, a tire center, and an automotive servicing use.
Cultural Element	Promote and preserve patronage of Issaquah's artistic, cultural and historical programs and venues to residents and visitors.	The project does not include impacts to the City's local artistic, cultural or historical landmarks.
Human Services	Address the needs of people with disabilities, including provision of housing, services, and transportation to allow these individuals to live as independently as possible.	The project site is designed to be compliant with accessibility requirements as required in the adopted building code.

2. *The development proposal meets all applicable codes, rules, regulations, and policies.*

Response: The Code permits car washes within the Mixed-Use zone with a level 2 decision. The project adheres to the following applicable design requirements:

Standard	Requirement	Response
Front Setback	10 feet	The site meets setback requirements.
Side Setback	None	The site meets setback requirements.
Rear Setback	None	The site meets setback requirements.
Impervious Surface	90%	The project proposes 71 percent impervious surface.

Parking	1 parking stall per employee at the maximum shift.	Site provides five (5) parking stalls, including three (3) designated parking stalls for self-serve vacuum services.
Stacking	6 stacking spaces	The site meets and exceeds the minimum stacking requirements.
Landscaping	<p>18 square feet per parking stall.</p> <p>10 percent of the overall site area.</p> <p>10 foot landscape setback along the front property line.</p>	<p>The site provides 1,325 square feet of interior parking lot landscaping. The site requires a minimum interior parking lot landscape area of 90 square feet (18 x 5 = 90 square feet).</p> <p>The overall site requires 1,840 square feet of landscaping. The site provides 5,270 square feet and exceeds landscaping standards.</p> <p>The site provides a minimum 10-foot buffer along 1st Avenue N.W.</p>
Architectural Design	<p>Façade should be broken up with a variety of colors and materials. Blank walls are discouraged and should be avoided using windows, trellises, and wall articulation.</p> <p>Bright colors are permitted as accent colors.</p>	<p>The car wash utilizes natural-looking stone veneer at the foundation with finished concrete walls. The car wash includes a tower feature with metal roofing.</p> <p>The car wash utilizes earth tones in the stone veneer. The white concrete walls are a neutral color. The car wash incorporates Brown Bear's signature accent colors of blue and green near the rooflines.</p>
Wall Signage	<p><u>Maximum Size</u> Primary sign maximum area standards are regulated based on the Table presented in IMC 18.11.100. Secondary signs are limited to 5% of the façade area or a maximum of 30 sq. ft.</p> <p><u>Number of Signs</u> Each individual business establishment may have a maximum of one (1) primary sign, which is a sign on the primary frontage of the building, and one (1) secondary sign on the secondary frontage of the building.</p>	<p>The east façade is considered the primary frontage for the purposes of applying the sign standards. The east façade is allowed a primary sign up to 100 sq. ft. based on the Table in IMC 18.11.100. The project proposes one (1) combination wall sign that consists of the Brown Bear logo and text for a total area of approximately 86 square feet. The primary signage meets the maximum area calculations. The project requests that the City consider the combination of the corporate logo and text to be a single sign measured using the smallest rectangular area surrounding each portion of sign.</p> <p>Additional Brown Bear logos (14 square feet) are provided on the south, west, and north elevations of the car wash building. The Auto Sentry also provides the Brown Bear logo on the north and south elevations of the canopy. It is understood that a separate Sign Permit will be required to review and permit wall signage for the site.</p>

Lighting	Exterior lighting for non-residential uses shall not exceed 5 footcandles. Maximum light spillover is .8 footcandles in the Mixed Use zone. Alternative Maximum Exterior Lighting Levels: Activity Areas: 10 FC Fueling Canopy Areas: 20 FC	A Photometric Plan prepared by LSI is enclosed for review. Based on the code, it appears there are exceptions to the maximum illumination standards for outdoor activity areas and fueling canopies. The Photometric Plan treats the Auto Sentry canopy as a fueling canopy with a max of 20 FC and considers all paved site areas to be considered "activity areas" at 10 FC max. We request staff to review and comment on any required revisions.
Trash and Recycling Enclosure	Enclosure shall include a roof and drain to the sanitary sewer.	The trash and recycling enclosure is equipped with a roof and complies with drainage requirements.

3. *The development proposal satisfies the elements of the Design Criteria Checklist.*

Response: Please see the above table. Applicable development regulations from Issaquah Municipal Code Chapter 18.07 and the project is in conformance with the City's design requirements.

8. Responses to Pre-Application Meeting

A pre-application meeting for the project occurred on July 19, 2019. The following action items were noted as requiring a response prior to the submittal of land use permits.

FIRE COMMENTS:

[Mark Lawrence]

1. *No additional hydrants are needed at this time.*

Response: Noted.

2. *At the moment, fire flow is adequate.*

Response: Noted.

3. *Based on the information provided, sprinklers or special alarm systems are required.*

Response: Further clarification is requested on the fire sprinkler and special alarm system requirements. The requirement for an automatic fire sprinkler system and alarm system is not anticipated for the project at this time with reference to the 2015 IFC.

BUILDING COMMENTS:

[James Gray]

1. *Applicable codes here are the 2015 International series of codes, along with the Uniform Plumbing Code and the National Electrical Code. Also - The Washington State Energy Code. We also have amendment to those, that being the State of Washington, City of Issaquah, and the City of Bellevue.*

Response: Noted.

2. *Restroom requirements are specified in the International Building Code (IBC) Chapter 29.*

Response: A public restroom is provided and will meet accessibility requirements.

3. *Accessibility requirements are varied; both for the building and the site. See IBC Chapter 11 and 2009 ANSI A117.1 for complete details.*

Response: The site is in compliance with IBC Chapter 11 and the 2009 ANSI. An accessible pathway and parking is provided throughout the site. An accessible restroom will be provided.

4. *An oil/water separate will be required for the building. A separate permit is not required, but all information needs to be submitted with the building permit.*

Response: An oil/water separator is proposed. Please see the enclosed civil plans for further detail.

5. *Building permits can be submitted and reviewed concurrently with a land use permit, but is not recommended. A building permit submittal must include mechanical, plumbing, accessibility, architectural, structural, and electrical. Electrical review and inspection and conducted by the State Labor & Industries offices.*

Response: Noted. At this time, a land use application will be submitted to the City's Planning Division for review. A building permit will not be submitted until the land use permit is approved.

STREET IMPROVEMENT COMMENTS:

[Chasen Simpson]

1. *The subject site is surrounded by three (3) rights-of-way and two of them will be treated like alleys. City staff would like to better understand the traffic demand and are requesting the applicant to provide anticipated daily vehicular trips based on existing car wash facilities with similar attributes throughout the Puget Sound area. We would also like queuing information during peak hours.*

Response: Please refer to the Trip Generation and Queue Analysis prepared by TENW dated November 11, 2019 that documents the trip-generation estimate and queuing analysis based on data collected at a local Brown Bear Car Wash facility located in Sammamish, Washington.

2. *All vehicle stacking must occur on-site and may not overflow into the rights-of-way. The applicant shall design queuing to support peak use that does not interfere with vehicular travel within the right of way.*

Response: Please refer to the enclosed Preliminary Site Plan. City Code requires a minimum of six (6) stacking spaces for the site. The project provides at least eight (8) stacking spaces with two (2) of the stacking spaces located between the car wash entrance and the Auto Sentry canopy and six (6) stacking spaces provided collectively at or behind the Auto Sentry canopy. Additional queuing beyond the six (6) stacking spaces is available on site with the temporary closure of the southernmost driveway entrance during periods when customer volumes exceed typical peak demand.

3. *Frontage improvements are required for the project, but are still being evaluated by the City due to the parcel line discrepancy. At the moment, the applicant will be responsible for road improvements along all three (3) frontages. Road improvements along 1st Avenue NW shall include, but are not limited to extending the sidewalk, adding crosswalk stripping, and ADA ramps. Curb must be installed along 1st Place NW to match the existing conditions to the south of the parcel.*

Response: Frontage improvements on 1st Avenue N.W. have been included on the plans as described above. Please see the enclosed title report and survey for clarification of the property boundary lines along the southwest portion of the property.

4. *Any layout that does not meet the City's Street Standards requires a Deviation of Standards. This process is described in the City's Street Standards.*

Response: Noted.

ENGINEERING COMMENTS:

[Denise Pirollo]

1. *The King County quarter section map shows the west property further east into the site. If this is correct the conceptual site plan shows the right-of-way as part of the project site. Please confirm the property boundary. This discrepancy must be resolved prior to submittal of a land use or construction permits. If a right-of-way vacation is needed, please reach out to Denise.*

Response: Please see the enclosed title report and ALTA survey. The property boundary does not interfere with the current site plan and a right-of-way vacation is not necessary.

2. *The project may use the existing 1-inch water meter.*

Response: The existing 1-inch meter will service the site's landscaping irrigation.

3. *The existing side sewer must either be abandoned or removed depending on the extend of contamination.*

Response: A new side sewer has been proposed. Please see the enclosed utility plan.

4. *All electricity service to the site must be undergrounded.*

Response: Noted. Electrical service to the site will be served through underground connections.

5. *Please confirm if the driveway to the north is a one-way or two-way driveway. If the driveway will be used for two-way traffic there is a circulation conflict with vehicles turning in and out of the site.*

Response: The north driveway is proposed as a two-way, full-access driveway.

PUBLIC WORKS OPERATIONS COMMENTS:

[Ron Blaskovich]

1. *The water meter box and lid shall be upgraded to the latest City Standards.*

Response: Noted.

2. *No connection shall be made before RPBA on exiting meter. City does not allow deduct meters Irrigation can come off domestic meter line but will be charged a sewer fee. Separate irrigation meter would allow for reduced sewer fee.*

Response: Noted. The project proposes a separate domestic and irrigation tap at the main.

3. *If installing RPBA outdoors provide adequate freeze protection. Consider moving device instead building at first wall penetration. Backflow prevention devices need separate permit, separate building or plumbing permit. Call Water Quality for Rough-In inspection at 425-837-3470 with questions. Schedule inspection online at MyBuildingPermit.com. Multiple backflow devices can be on one permit.*

Response: The proposed RPBA calls out for electrical heating requirements.

4. *City records show a private 12" concrete pipe and catch basin within the vicinity of the northern property line. Please show and call-out to be abandoned and plugged at City catch basin.*

Response: The 12-inch concrete pipe and catch basin will be abandoned and plugged at City catch basin.

STORM WATER COMMENTS:

[Stacey Rush]

1. *Compliance with 2014 Ecology Storm Water Management Manual for Western WA and 2017 Issaquah Addendum to the City adopted storm design manual is required. This includes, but is not limited to submittal of the following construction permits:*
 - a. *Storm Drainage Technical Information Report (addressing minimum requirements)*
 - b. *Temporary Erosion and Sediment Control Plan (within the plan-set)*
 - c. *Construction Storm Water Pollution Prevention Plan Report (TESC & SWPPP)**Note: 2014 Ecology Storm Design Manual is required for all projects after January 2017. This project does not have land use vesting to previous 2009 KCSWDM. SEPA does not vest a project for stormwater requirements.*

Response: Noted. A Stormwater Technical Information Report (TIR) and SEPA Checklist are included with the land use application for review. The TESC and SWPPP will be provided at construction permitting.

2. *Enhanced Water Quality Treatment is required. The proposed Contech Storm Filter provides only Basic Water Quality Treatment.*

Response: The project proposes a Bio Clean Modular Wetland facility. This device is approved to provide enhanced water quality treatment.

3. *The proposed Infiltration Gallery for storm runoff from this site is not allowed for commercial sites within CARA Class 1 Zone and Sammamish Plateau Water District's (SPWD) this site.*

Response: The project no longer proposes infiltration of stormwater runoff.

4. *Submittal of a Hazardous Material Construction Inventory List is required for construction permits.*

Response: Noted.

PLANNING COMMENTS:

[Valerie Porter]

1. *Since the scope of work for removing contaminated soils on-site has changed, please provide a phasing plan identifying the construction of the car wash, installation of remediation equipment, and frontage improvements.*

Response: Please refer to the enclosed Remediation/Mitigation Status Report prepared by Aspect Consulting, LLC dated November 5, 2019.

2. *Below shows the permits that are required for the project. The Site Development Permit and the SEPA review will be processed concurrently, but need to be applied for through MyBuildingPermit.com separately. Please see the City's website for submittal requirements.*

Response: Noted.

3. *The Site Development Permit must go before the Development Commission. The average time to process a Site Development Permit is 3-5 months.*

Response: Noted.

4. *Please identify how Recology will pick up waste containers for the site.*

Response: The Route Manager with Recology confirmed that the trash enclosure is adequate for 2 to 4 yard dumpsters, including a container for recycling. The enclosure is designed to accommodate both frontload and roll-out service from the adjacent alley. A copy of the email correspondence with Recology is enclosed for your reference.

5. *Per IMC 18.09.050, a car wash must provide a minimum of six (6) stacking spaces per drive-through plus 1 parking stall per employee at maximum shift. Vehicle stacking will be measured from the auto sentry canopy.*

Response: Please see the enclosed Preliminary Site Plan. The project provides eight (8) stacking spaces with two (2) of the stacking spaces located between the car wash entrance and the auto sentry canopy and six (6) stacking spaces provided collectively at or behind the auto sentry canopy. Additional stacking is available with the temporary closure of the southernmost driveway entrance during periods of high volumes that exceed typical demand.

6. *The project will be subject to the following impact fees: traffic, parks, fire, police, general government, and bicycle & pedestrian.*

Response: Noted.

7. *The site plan does not show any on-site lighting. Lighting information must be provided with the land use permit. Please see IMC 18.07 for outdoor lighting standards.*

Response: Please see the enclosed Photometric Plan.

8. *The project site must meet the minimum tree density requirement listed in IMC 18.12.1370. This will be reviewed during the land use process.*

Response: The site requires four (4) trees per 5,000 square feet of developable area in accordance with IMC 18.12.1370. The site requires fifteen (15) trees based on 18,402 square feet of developable area. The project proposes the installation of 16 trees and exceeds the minimum tree density requirement.

9. *Landscaping along the frontage and perimeter must be a Type 3 landscape. Please see IMC 18.12 for details. This will be reviewed during the land use process.*

Response: Please see the enclosed Preliminary Landscape Plan. Trees are provided along the perimeter and are planted every 20 feet on center and shrubs are planted in accordance with Table 18.12.070(B)(3). Perimeter landscaping is provided as required along 1st Avenue NW.

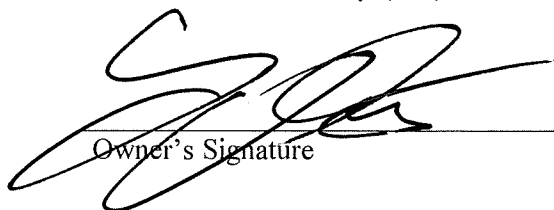
10. *Signage will require a separate sign permit.*

Response: Noted.

CITY OF ISSAQUAH
AFFIDAVIT OF OWNERSHIP

STATE OF WASHINGTON)
COUNTY OF KING)
CITY OF ISSAQUAH)

I/we, Leice Odernat for CAR WASH ENTERPRISES INC.
Vice President + General Counsel, being duly sworn depose and say, that I
am (we are) the owner(s) of the property involved in this application and that the foregoing
statements and answers herein contained and the information herewith submitted are in all
respects true and correct to the best of my (our) knowledge and belief.



Owner's Signature

11-14-19

Date

Owner's Signature

Date

Mailings: PO Box 70527 Seattle WA 98107
Street City State Zip

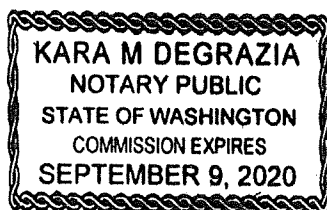
Phone: 206 274 2603
Home Business

Subscribed and sworn to before me this 14th day of November, 2019

Kara M. Degrazia Kara R. Edgemi

Notary Public in and for the
STATE OF WASHINGTON, residing at

Seattle



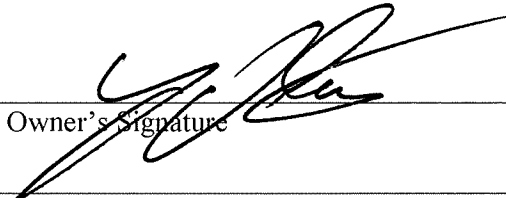
CITY OF
City of Issaquah
AFFIDAVIT OF AGENT AUTHORITY

STATE OF WASHINGTON)
COUNTY OF KING)
CITY OF ISSAQUAH)

I/we, Lance Odermat for CARWASH ENTERPRISES INC.
Vice President & General Counsel, being duly sworn depose and say, that I am (we are) the
owner(s) of the property legally described below, and that Joe Giuseffi
has my/our permission to act as my/our agent on my/our behalf for this application for

for the subject property with the City of Issaquah.

Legal Description: SEE ATTACHED

<u></u>	<u>11-14-19</u>
Owner's Signature	Date
_____ Owner's Signature	_____ Date

Mailing Address: PO Box 70527 Seattle WA 98107

Street	City	State	Zip
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Phone: _____

Home	Business
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Subscribed and sworn to before me this 14th day of November, 2019

Kara M. DeGrazia Berna R. DeSigue

Notary Public in and for the
STATE OF WASHINGTON, residing at

Seattle

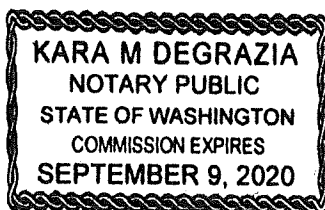


EXHIBIT 'A'

LEGAL DESCRIPTION:

LOT(S) 28, 29, 30 AND 31, BLOCK 8, HERBERT S. UPPER'S FIRST ADDITION TO ISSAQUAH, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 13, IN KING COUNTY, WASHINGTON;

EXCEPT THAT PORTION DEEDED FOR HIGHWAY PURPOSES FOR PRIMARY STATE HIGHWAY NO. 2;

AND ALSO EXCEPTING THEREFROM THAT PART OF LOTS 28, 29, 30 AND 31, BLOCK 8, LYING SOUTHWESTERLY OF A LINE DRAWN PARALLEL WITH AND 100 FEET SOUTHWESTERLY WHEN MEASURED AT RIGHT ANGLES, FROM THE PRIMARY STATE HIGHWAY NO. 2 LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2 LAKE SAMMAMISH PAVEMENT TO ISSAQUAH, AND LYING WESTERLY AND SOUTHWESTERLY OF A LINE DRAWN 30 FEET EASTERLY AND NORTHEASTERLY, WHEN MEASURED AT RIGHT ANGLES AND/OR RADIALY, FROM THE "A" LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2 MERCER ISLAND TO ISSAQUAH.

Brown Bear Car Wash Site Development Permit Color Photographs

**Car Wash Enterprises, LLC
55 N.W. Gilman Boulevard, Issaquah, WA 98027
APN #8843500440
Our Job. No. 20693**









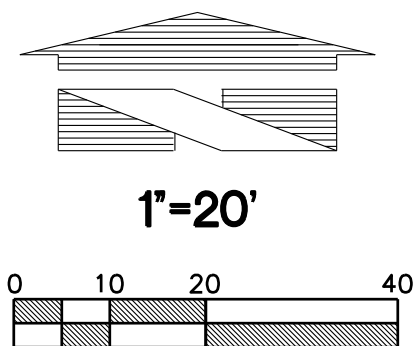












LAND USE INFORMATION

CURRENT ZONING
MIXED USE

BUILDING SETBACKS
MINIMUM FRONT YARD: 10 FT
MINIMUM SIDE YARD: NONE
MINIMUM REAR YARD: NONE

CANOPY SETBACKS
MINIMUM FRONT YARD: 10 FT
PRINCIPAL BUILDING: 6 FT
DISPENSER SETBACKS: 10 FT
PARKING SETBACKS: NONE
LANDSCAPE SETBACK: 10 FT

FLOOR AREA RATIO:
MAXIMUM FAR: 75%
PROPOSED FAR: 11.4%

IMPERVIOUS COVERAGE
MAXIMUM IMPERVIOUS COVERAGE: 90%
PROPOSED IMPERVIOUS COVERAGE: 71.6%

MAXIMUM BUILDING HEIGHT: 48 FT

LANDSCAPING
LANDSCAPING REQUIRED: 10% OF SITE AREA (1,840 SF)
SITE LANDSCAPE AREA PROVIDED: 5,270 SF (29%)
INTERIOR LANDSCAPE REQUIRED: 18 SF PER PARKING STALL (5 STALLS X 18 SF =90 SF)
INTERIOR LANDSCAPE PROVIDED: 1,325 SF

BUILDING DATA:

CAR WASH
BUILDING AREA: 2,125 SF

BUILDING HEIGHT: 31'-3"
CONSTRUCTION TYPE: VB
USE GROUP: B
TYPE: CONCRETE FOUNDATION, CONCRETE WALLS, STEEL FRAME ROOF.
WATER USE: 8,000 GPD (ESTIMATE)

AUTO SENTRY
CANOPY AREA: 540 SF
CANOPY HEIGHT: 12'-6"
CONSTRUCTION TYPE: VB
USE GROUP: B
TYPE: CONCRETE FOUNDATION, STEEL COLUMNS AND ROOF.
WATER USE: N/A

SITE INFORMATION

(SITE AS DEFINED BY PARCEL BOUNDARY)

LOT AREA
18,431± SQ. FT. (0.423± ACRES)

PROPERTY ADDRESS
55 NW GILMAN BLVD
ISSAQUAH, WA 98027

TAX PARCEL NUMBER
8843500440

EXISTING ON-SITE SURFACE AREAS
TOTAL IMPERVIOUS: 16,150 SF (0.371 AC)
PERVIOUS/LANDSCAPE AREA: 2,281 SF (0.052 AC)

PROPOSED ON-SITE SURFACE AREAS
TOTAL IMPERVIOUS: 13,184 SF (0.303 AC)
PERVIOUS/LANDSCAPE AREA: 5,247 SF (0.120 AC)

PARKING STALL INFORMATION
PARKING STALLS REQUIRED: (2.0 PER 1,000 SF)

TOTAL STANDARD PARKING STALLS: 4
ADA PARKING STALLS: 1
COMPACT PARKING STALLS: 0
TOTAL PARKING STALLS PROVIDED: 5

PERMIT REQUIREMENTS
CITY OF ISSAQUAH BUILDING PERMIT
CITY OF ISSAQUAH GRADING PERMIT
CITY OF ISSAQUAH ROW PERMIT
CITY OF ISSAQUAH FIRE PERMIT
CITY OF ISSAQUAH SIGN PERMIT

UTILITY CONTACT INFORMATION

GAS UTILITY: PUGET SOUND ENERGY
355 110TH AVE NE
BELLEVUE, WA 98004
TELEPHONE: (1-888-321-7779)

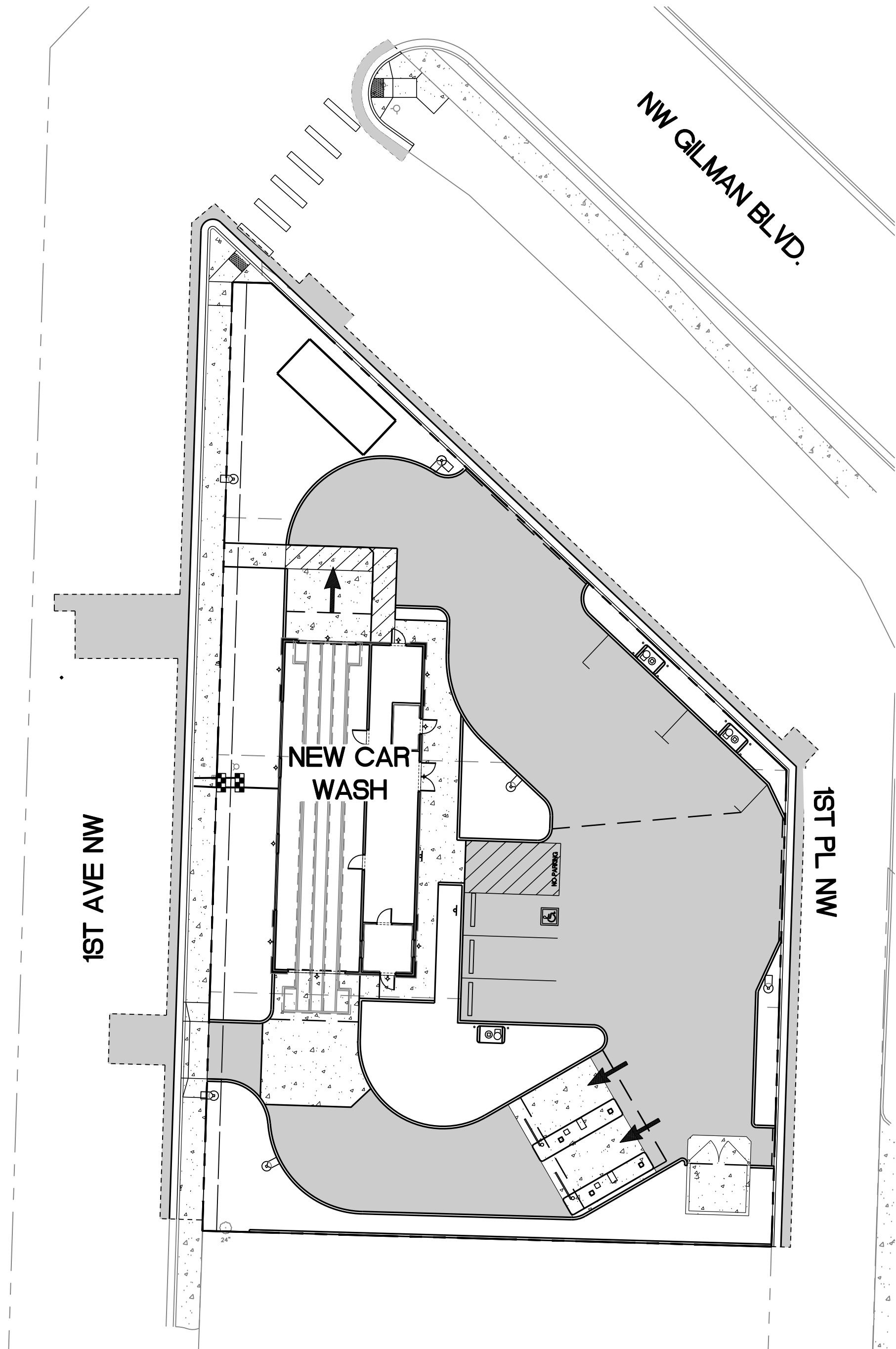
ELECTRICAL: PUGET SOUND ENERGY
355 110TH AVE NE
BELLEVUE, WA 98004
TELEPHONE: (1-888-321-7779)

TELEPHONE: CENTURY LINK
23315 66TH AVENUE SOUTH
KENT, WA 98032
TELEPHONE: 1-(800) 871-9244

SEWER/WATER/STORMWATER: CITY OF ISSAQUAH
1775 12TH AVE NW
PO BOX 1307
ISSAQUAH, WA 98027
PHONE: (425) 837-3400
PWE@ISSAQUAHWA.GOV

PRELIMINARY COVER SHEET FOR BROWN BEAR CAR WASH

SE ¼ OF NE ¼ OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



OWNER

CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NORTHEAST
SEATTLE, WASHINGTON 98107
CONTACT: JOE GIUSEFFI
EMAIL: Joe.Giuseffi@brownbear.com

SURVEYOR

PLS, INC.
1375 NW MALL ST., SUITE 3
ISSAQUAH, WA 98027
TEL: (425) 313-9378
FAX: (425) 313-9379
EMAIL: BEN@PLSINC.SURVEY.COM
CONTACT: BEN PETERSEN, P.L.S.

ENGINEER

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVE. SOUTH
KENT, WA 98032
TEL: (425) 251-6222
FAX: (425) 251-8782
CONTACT: CHRIS JENSEN, P.E.

ARCHITECT:

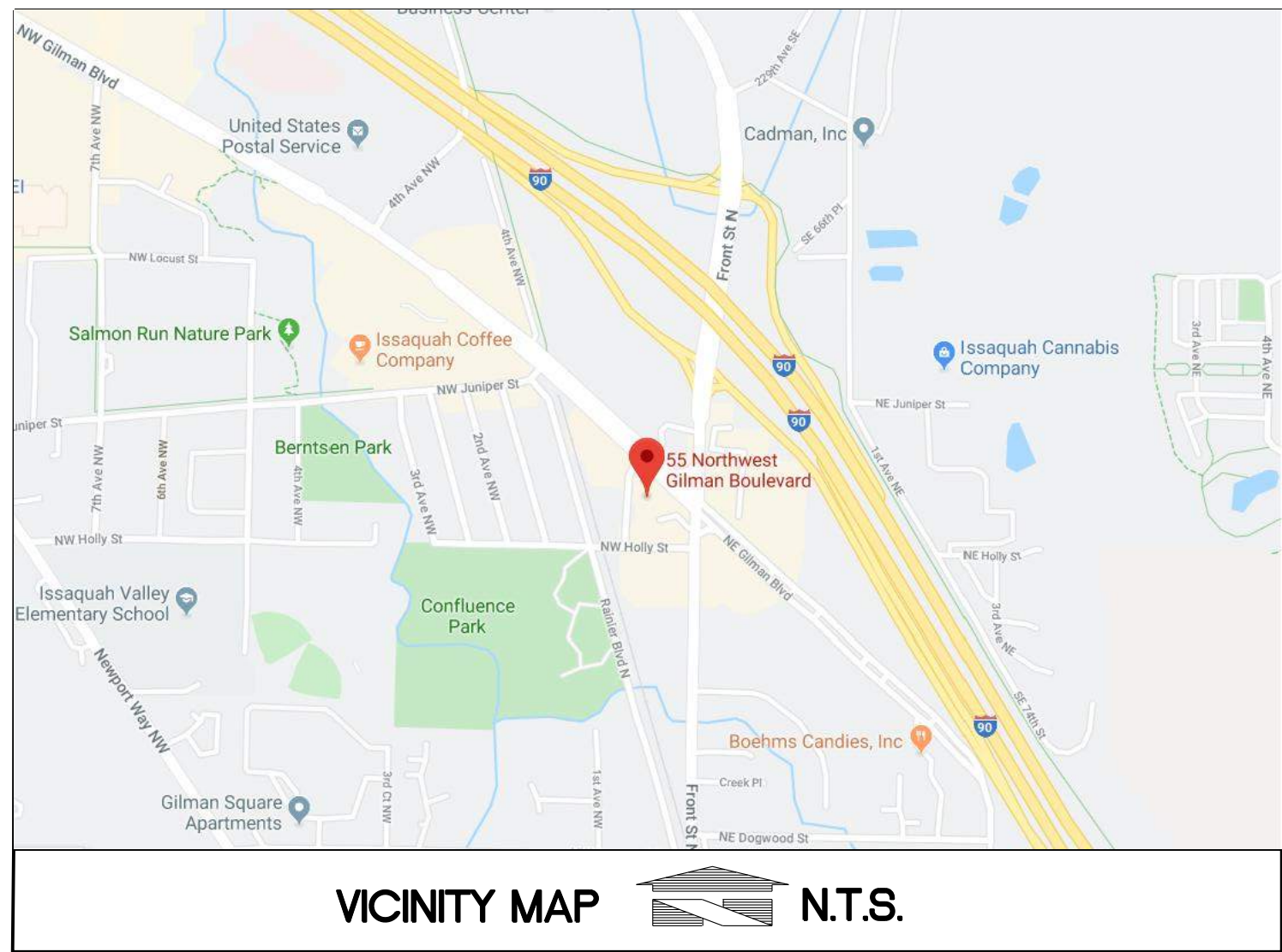
BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVE. SOUTH
KENT, WA 98032
TEL: (425) 251-6222
FAX: (425) 251-8782
CONTACT: STEVE KATTNER

GEOTECHNICAL ENGINEER:

ASPECT CONSULTING, LLC
710 2ND AVENUE, SUITE 550
SEATTLE, WA 98104
TEL: (206) 780-7727
CONTACT: RORY KILKENNY, P.E.

LANDSCAPE ARCHITECT:

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVE. SOUTH
KENT, WA 98032
TEL: (425) 251-6222
FAX: (425) 251-8782
CONTACT: JEFF VARLEY, R.L.A.



LEGAL DESCRIPTION
PER FIRST AMERICAN TITLE INSURANCE COMPANY FILE NO. NCS-776876-WAI DATED FEBRUARY 8, 2016 AT 7:30AM

PARCEL 1:

LOT(S) 28, 29, 30 AND 31, BLOCK 8, HERBERT S. UPPER'S FIRST ADDITION TO ISSAQUAH, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 13, IN KING COUNTY, WASHINGTON;

EXCEPT THAT PORTION DEEDED FOR HIGHWAY PURPOSES FOR PRIMARY STATE HIGHWAY NO. 2;

AND ALSO EXCEPTING THEREFROM THAT PART OF LOTS 28, 29, 30 AND 31, BLOCK 8, LYING SOUTHWESTERLY OF A LINE DRAWN PARALLEL WITH AND 100 FEET SOUTHWESTERLY WHEN MEASURED AT RIGHT ANGLES, FROM THE PRIMARY STATE HIGHWAY NO. 2 LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2 LAKE SAMMAMISH PAVEMENT TO ISSAQUAH, AND LYING WESTERLY AND SOUTHWESTERLY OF A LINE DRAWN 30 FEET EASTERLY AND NORTHEASTERLY, WHEN MEASURED AT RIGHT ANGLES AND/OR RADIALLY, FROM THE "A" LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2 MERCER ISLAND TO ISSAQUAH.

PARCEL 2:

THAT PART OF LOTS 28, 29, 30 AND 31, BLOCK 8, HERBERT S. UPPER'S FIRST ADDITION TO ISSAQUAH, ACCORDING TO THE PLAT RECORDED IN VOLUME 12 OF PLATS, PAGE 13, LYING SOUTHWESTERLY OF A LINE DRAWN PARALLEL WITH AND 100 FEET SOUTHWESTERLY WHEN MEASURED AT RIGHT ANGLES, FROM THE PRIMARY STATE HIGHWAY NO. 2 LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2 LAKE SAMMAMISH PAVEMENT TO ISSAQUAH, AND LYING WESTERLY AND SOUTHWESTERLY OF A LINE DRAWN 30 FEET EASTERLY AND NORTHEASTERLY, WHEN MEASURED AT RIGHT ANGLES AND/OR RADIALLY, FROM THE "A" LINE SURVEY OF PRIMARY STATE HIGHWAY NO. 2, MERCER ISLAND TO ISSAQUAH.

HORIZONTAL DATUM
PER RECORD OF SURVEYS

VERTICAL DATUM
ASSUMED

CIVIL SHEET INDEX:

- C1.0 - PRELIMINARY COVER SHEET
- C2.0 - TOPOGRAPHIC SURVEY
- C3.0 - PRELIMINARY SITE PLAN
- C4.0 - PRELIMINARY GRADING AND DRAINAGE PLAN
- C5.0 - PRELIMINARY UTILITY PLAN
- C6.0 - AGENCY DETAILS
- C6.1 - AGENCY DETAILS
- C6.2 - AGENCY DETAILS

LANDSCAPE PLANS:

- L1 - PRELIMINARY PLANTING PLAN
- L2 - LANDSCAPE NOTES
- L3 - LANDSCAPE DETAILS
- L4 - PRELIMINARY IRRIGATION PLAN
- L5 - IRRIGATION NOTES AND DETAILS
- L6 - IRRIGATION DETAILS
- L7 - IRRIGATION DETAILS

LEGEND:

PROPOSED	EXISTING	
CURB AND GUTTER		LUMINAIRE (LUM.)
BARRIER CURB		YARD LIGHT
CONCRETE		POWER METER
ASPHALT		POWER POLE
SWALE		JUNCTION BOX (AS NOTED)
SAWCUT		CATCH BASIN (CB)
CONTOUR	—432—	STORM MANHOLE (SDMH)
WATER	—SD—	SANITARY SEWER MANHOLE (SSMH)
WATER METER		CLEANOUT (AS NOTED)
STORM		GAS METER
CONCRETE CONTROL JOINT	—SS—	GAS VALVE
CONCRETE EXPANSION JOINT		WATER VALVE (WV)
SANITARY	—G—	FIRE HYDRANT(FH)
GAS	—P (OH)—	CONNECTION(FDC)
POWER	—P (UG)—	WATER METER
PAINT STRIPE		SIGN
TYPE 1 CATCH BASIN		DIRECTIONAL ARROW
TYPE 2 CATCH BASIN		BOLLARD
SANITARY SEWER CLEANOUT		CONIFEROUS TREE
LOT LIGHT		DECIDUOUS TREE

ESTIMATED EARTHWORK QUANTITIES:

CUT: 750 CY

FILL: 150 CY

NET: 600 CY (CUT)

AREA TO BE DISTURBED -0.499 AC

EARTHWORK QUANTITIES ARE APPROXIMATE AND HIGHLY DEPENDANT ON SOIL CONDITIONS ENCOUNTERED DURING CONSTRUCTION. CONTRACTOR SHOULD PERFORM INDEPENDENT ESTIMATE FOR BIDDING.

SITE COVERAGE SUMMARY

LOT AREA	18,431 SF
PROPOSED IMPERVIOUS SURFACE:	13,184 SF
FLOOR AREA:	2,001 SF
PROPOSED PERVIOUS SURFACE:	5,247 SF
FLOOR AREA RATIO:	0.109
ROW IMPROVEMENTS AREA:	3,293 SF
PROPOSED IMPERVIOUS SURFACE (ROW):	3,226 SF
PROPOSED PERVIOUS SURFACE (ROW):	67 SF

PRELIMINARY - ENTITLEMENTS
NOT FOR CONSTRUCTION

ATTACHMENT 5

PRELIMINARY COVER SHEET
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

Title:

For: CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107

For:

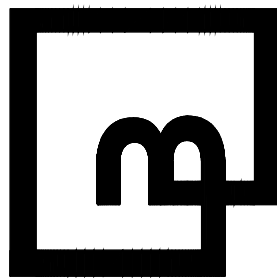


4/3/2020

Scale: Horizontal 1" = 20' Vertical NA

Designed: ADW Draw: ADW Checked: AEM Approved: CRJ Date: 11/15/19

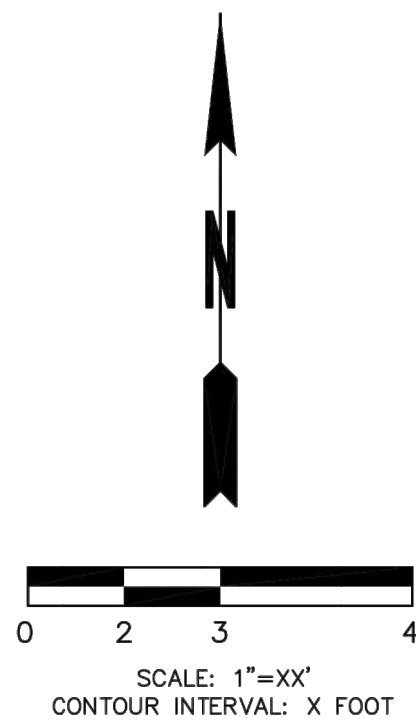
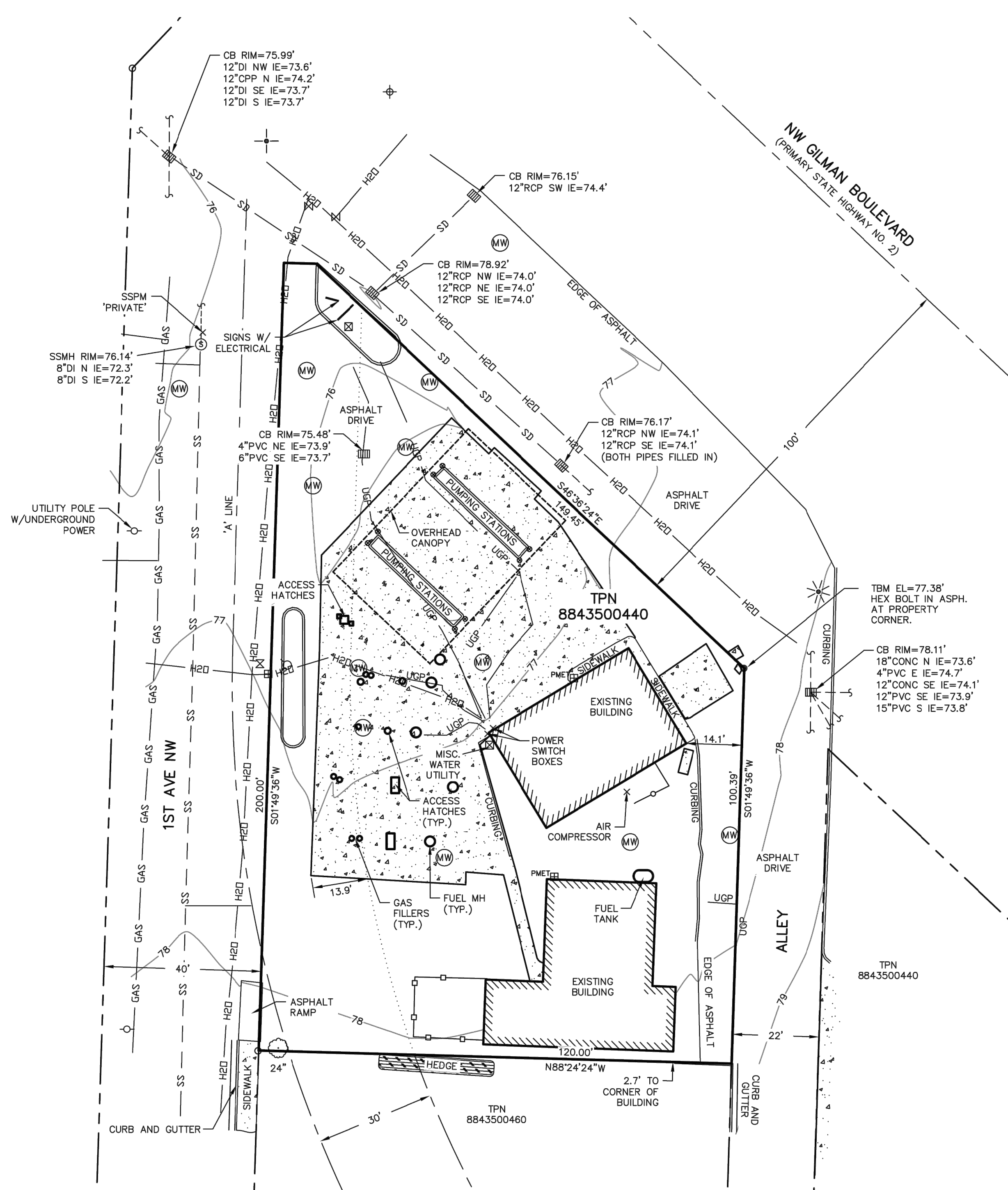
Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number 20693
Sheet C1.0 of 8

TOPOGRAPHIC SURVEY

NE 1/4 SEC. 28
TOWNSHIP 24 NORTH, RANGE 6 EAST W.M.
KING COUNTY, WASHINGTON



LEGEND:

TPN	TAX PARCEL NUMBER
○	FOUND REBAR AND CAP (AS NOTED)
TBM	TEMPORARY BENCH MARK
	24\" MAPLE TREE
	BOLLARD
	WOOD FENCE
	CHAIN LINK FENCE
	CONCRETE SURFACE
	POWER METER
	POWER JUNCTION BOX
	UTILITY POLE
	UNDERGROUND POWER PAINT MARKS
	GAS PAINT MARKS
	MONITORING WELL
	FIRE HYDRANT
	IRRIGATION CONTROL VALVE
	WATER METER
	WATER VALVE
	WATER PAINT MARKS
	SANITARY SEWER MANHOLE (SSMH)
	SANITARY SEWER PAINT MARKS
	SANITARY SEWER CONNECTION
	CATCH BASIN (CB)
	STORM PAINT MARKS
	STORM CONNECTION
	INVERT ELEVATION
	REINFORCED CONCRETE PIPE
	CORRUGATED PLASTIC PIPE
	DUCTILE IRON PIPE
	PLASTIC PIPE
	CONCRETE PIPE

LEGAL DESCRIPTION:

PER FIRST AMERICAN TITLE INSURANCE COMPANY FILE NO. NCS-776876-WAI
DATED FEBRUARY 8, 2016 AT 7:30 AM

PARCEL 1:

LOT(S) 28, 29, 30 AND 31, BLOCK 8, HERBERT S. UPPER'S FIRST ADDITION TO ISSAQUAH, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 12 OF PLATS, PAGE 13, IN KING COUNTY, WASHINGTON;

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NOTES AND COMMENTS:

1.) **PURPOSE OF SURVEY:** THE PURPOSE OF THIS SURVEY WAS TO DEVELOP A 1-FOOT CONTOUR INTERVAL TOPOGRAPHIC MAP OF THE SUBJECT PROPERTY FOR USE AS A PLANNING AND DESIGN BASE BY OTHERS. A BOUNDARY SURVEY OF THE SUBJECT PROPERTY WAS PERFORMED IN 2016 AND 2017.

2.) **HORIZONTAL DATUM:** THE OVERALL HORIZONTAL DATUM FOR THIS PROJECT IS NAD 83/2011, WASHINGTON COORDINATE SYSTEM, NORTH ZONE, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

3.) **VERTICAL DATUM:** THE VERTICAL DATUM FOR THIS SURVEY IS NAVD 88, BASED ON GPS MEASUREMENTS USING THE WASHINGTON STATE REFERENCE NETWORK.

THE ELEVATIONS AND CONTOURS SHOWN HEREON ARE ASSUMED TO BE ACCURATE TO THE FOLLOWING:

- HARD-SURFACE SPOT ELEVATIONS = +/- 0.1-FEET.
- GROUND ELEVATIONS = +/- 0.2-FEET.
- CONTOURS = +/- ONE-HALF THE CONTOUR INTERVAL.

THE CONTOUR INTERVAL OF ONE-FOOT WAS INTERPOLATED BY AN AUTOCAD-CALCULATED DIGITAL TERRAIN MODEL (DTM) USING FIELD-SURVEYED GROUND AND FEATURE ELEVATIONS.

4.) **FIELD SURVEY METHODOLOGY:** FIELD MEASUREMENTS FOR THIS SURVEY WERE PERFORMED USING A 5-SECOND OR BETTER ELECTRONIC TOTAL STATION.

5.) **INSTRUMENT CALIBRATION:** ALL MEASURING INSTRUMENTS EMPLOYED IN THIS SURVEY HAVE BEEN MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

6.) **THIS MAP GRAPHICALLY REPRESENTS CONDITIONS AND FEATURES EXISTING AT THE TIME OF THIS SURVEY ONLY, WHICH WAS PERFORMED DURING APRIL OF 2016 AND CONVERTED TO HORIZONTAL AND VERTICAL DATUM IN OCTOBER 2108.**

7.) **THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT NAMED HEREON. ITS' SURVEY DOES NOT EXTEND TO ANY UNNAMED PERSON OR PERSONS WITHOUT THE EXPRESS RECERTIFICATION BY THIS SURVEYOR NAMING SUCH PARTY.**

8.) **FOR YOUR INFORMATION:** 0.0833 FEET = 1 INCH ON THE GROUND

9.) **KING COUNTY TAX PARCEL NUMBER:** 8843500440

10.) **PARCEL AREA:** 18,402 ± SQ. FT. (0.42 ACRES)

11.) **THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM A COMBINATION OF:** 1.) THE FIELD SURVEYED LOCATION OF VISIBLE SURFACE UTILITY STRUCTURES SUCH AS MANHOLE LIDS, GRATES, GAS AND WATER VALVE LIDS, ETC. AND 2.) MAPPING OF EXISTING PAINT MARKS OR MARKERS PLACED BY AN UNDERGROUND UTILITY LOCATOR SERVICE. **WE MAKE NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, NOR THAT THEY ARE IN THE EXACT LOCATION SHOWN.**

UTILITY INVERT ELEVATIONS AND PIPE / FLOW LINE DIAMETERS SHOWN HEREON ARE BASED ON OBSERVATIONS FROM THE TOP OF THE UTILITY STRUCTURE AND ARE APPROXIMATE ONLY. FOR SAFETY REASONS NO PHYSICAL ENTRY INTO THE UTILITY STRUCTURE WAS PERFORMED DURING THE COURSE OF THIS SURVEY.

12.) **THE PROPERTY AND PUBLIC RIGHT-OF-WAY LINES SHOWN HEREON ARE BASED ON A BOUNDARY SURVEY BY PLS, INC. PERFORMED IN 2016 AND 2017 WITH THE MAPPING OF THE SITE. SAID BOUNDARY SURVEY WAS PERFORMED WITHOUT BENEFIT OF A CURRENT TITLE REPORT AND, ACCORDINGLY, MAY NOT INCLUDE EASEMENTS AND OTHER RESTRICTIONS OF RECORD, IF ANY.**

13.) **WE HAVE USED GRAPHIC SYMBOLS TO REPRESENT SOME FEATURES ON THIS MAP, SUCH AS UTILITIES, TREES AND FENCES. THE DEFAULT SIZE OF THOSE SYMBOLS MAY NOT REFLECT THE TRUE SIZE OF THE FEATURE THAT WAS MAPPED.**

CARWASH ENTERPRISES, INC.
dba
BROWN BEAR CARWASH
FOR PROPERTY AT
55 NW GILMAN BLVD
ISSAQUAH, WA 98027



REVISIONS

NO.	DATE	DESCRIPTION	BY

TOPOGRAPHIC SURVEY

SHEET TITLE:

CARWASH ENTERPRISES
dba
BROWN BEAR CARWASH

DRAWN BY: BPM	CHECKED BY: KAP
SCALE: 1"= 20'	DATE: NOV 2, 2018

JOB NO:
18206

DRAWING NAME:
18206 TOPO.DWG

SHEET C2.0 of 8

#-CONSTRUCTION NOTES: SITE PLAN

1. NEW BROWN BEAR CAR WASH.
2. NEW COVERED TRASH ENCLOSURE WITH CONCRETE PAD, 7" HIGH WALLS W/ SPLIT FACE BLOCKS. SEE ARCHITECTURAL PLANS FOR DETAILS.
3. NEW VACUUM UNIT.
4. NEW ACCESSIBLE PARKING SIGN, AND ACCESSIBLE AISLE "NO PARKING" SIGN. CONTRACTOR TO PROVIDE HARDWARE FOR WALL MOUNT.
5. NEW ACCESSIBLE PAVEMENT SYMBOL.
6. PARKING STALL MARKINGS SHALL BE 4" WIDE WHITE PAINTED STRIPES TO DIMENSIONS (TYP.).
7. PAVEMENT MARKINGS - 4" WIDE WHITE PAINTED STRIPES @ 3' O.C. / 45° ANGLE.
8. NEW ON-SITE BARRIER CURB.
9. NEW ASPHALT PAVEMENT.
10. NEW CONCRETE SLAB UNDER CANOPY.
11. WHITE PAINTED DIRECTION ARROWS.
12. NEW AUTO SENTRY.
13. NEW AUTO SENTRY CANOPY.
14. NEW CLEARANCE SIGN.
15. NEW WHEEL STOP (TYP. OF 3).
16. NEW LANDSCAPING.
17. CAR WASH APRON.
18. NEW OFF-SITE SIDEWALK PER CITY OF ISSAQUAH STANDARD DRAWING T-38.
19. NEW CURB AND GUTTER PER CITY OF ISSAQUAH STANDARD DRAWING T-38.
20. NEW COMMERCIAL DRIVEWAY FOR CARWASH BYPASS PER CITY OF ISSAQUAH STANDARD DRAWING T-38.
21. NEW PERPENDICULAR RAMP PER CITY OF ISSAQUAH STANDARD DRAWING T-08.
22. EMPLOYEE PARKING STALL.
23. PROPOSED ON-SITE CONCRETE WALKWAY.
24. PROPOSED STORMWATER DETENTION VAULT.
25. EXISTING FIRE HYDRANT.
26. RE-LOCATE EXISTING WATER METER. RE-USE FOR IRRIGATION.
27. PROPOSED DOMESTIC WATER SERVICE METER, AND RPBA.
28. PROPOSED CORE-TAP TO EXISTING SEWER MAIN.
29. PROPOSED SANITARY SEWER LINE.
30. PROPOSED LOCATION OF OFFSITE POWER CONNECTION.
31. PROPOSED LOCATION OF TRANSFORMER.
32. SAWCUT LINE.
33. CROSSWALK PAVEMENT MARKINGS PER CITY OF ISSAQUAH STANDARD DETAIL T-36. METHYL METHACRYLATE (TYP.).
34. VEHICLE STACKING (TYP.).
35. RETAIN EXISTING 24" DIA TREE.
36. BUILDING MOUNTED LIGHT FIXTURE (TYP.).
37. PROPOSED LOT LIGHT (TYP.).
38. PROPOSED LOCATION OF OFFSITE TELECOMMUNICATIONS/CABLE CONNECTION.
39. PROPOSED LOCATION OF OFFSITE GAS CONNECTION.
40. AV/SVE SOIL REMEDIATION ENCLOSURE.
41. PROPOSED STREET LIGHT.

ACCESSIBLE PATH OF TRAVEL NOTE:

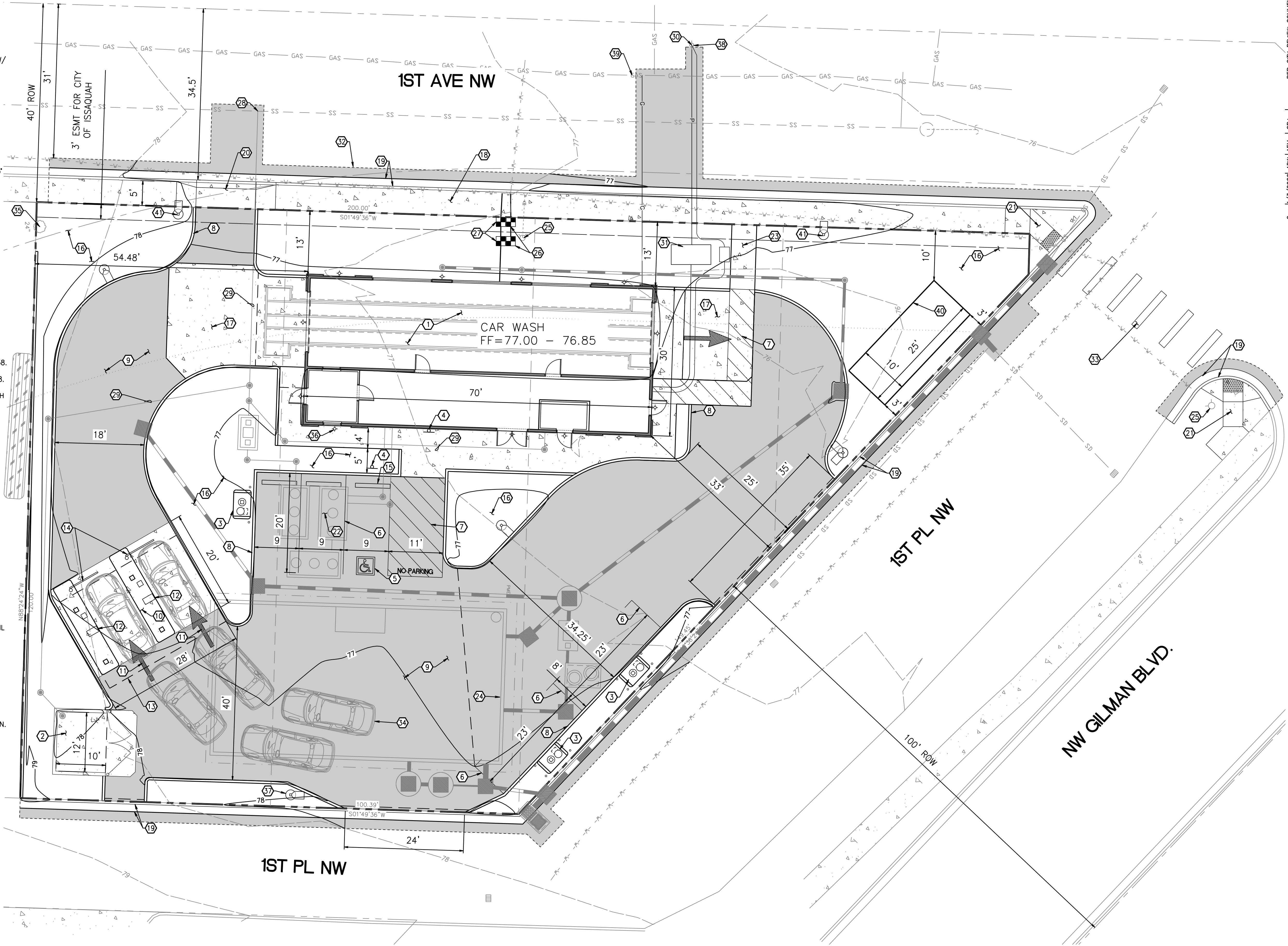
WALKWAYS ALONG ACCESSIBLE ROUTES OF TRAVEL SHALL BE CONTINUOUSLY ACCESSIBLE, BE A MINIMUM OF 44" IN WIDTH, HAVE A MAXIMUM 2.0% CROSS SLOPE, AND SHALL HAVE RAMPS COMPLYING WITH ACCESSIBILITY STANDARDS (SECTION 405) WHERE NECESSARY TO CHANGE ELEVATION AT A LONGITUDINAL SLOPE EXCEEDING 5% (1:20).

PRELIMINARY SITE PLAN

FOR

BROWN BEAR CAR WASH

SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



2 4/23/2020 ADW / AEM CRU PER CITY REVIEW COMMENTS RECEIVED 02/19/2020
1 11/15/19 ADW / AEM CRU LAND USE SUBMITTAL

Revision

Title:

PRELIMINARY SITE PLAN
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

For:
CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107

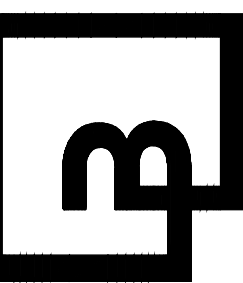


4/3/2020

Scale:
Horizontal
1" = 10'
Vertical
NA

Designed ADW
Drawn ADW
Checked AEM
Approved CRU
Date 11/15/19

Barghausen
Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222
barghausen.com



Job Number

20693

Sheet

C3.0

8

PRELIMINARY - ENTITLEMENTS
NOT FOR CONSTRUCTION



Know what's below.
Call before you dig.
Dial 811

PRELIMINARY GRADING AND DRAINAGE PLAN

FOR

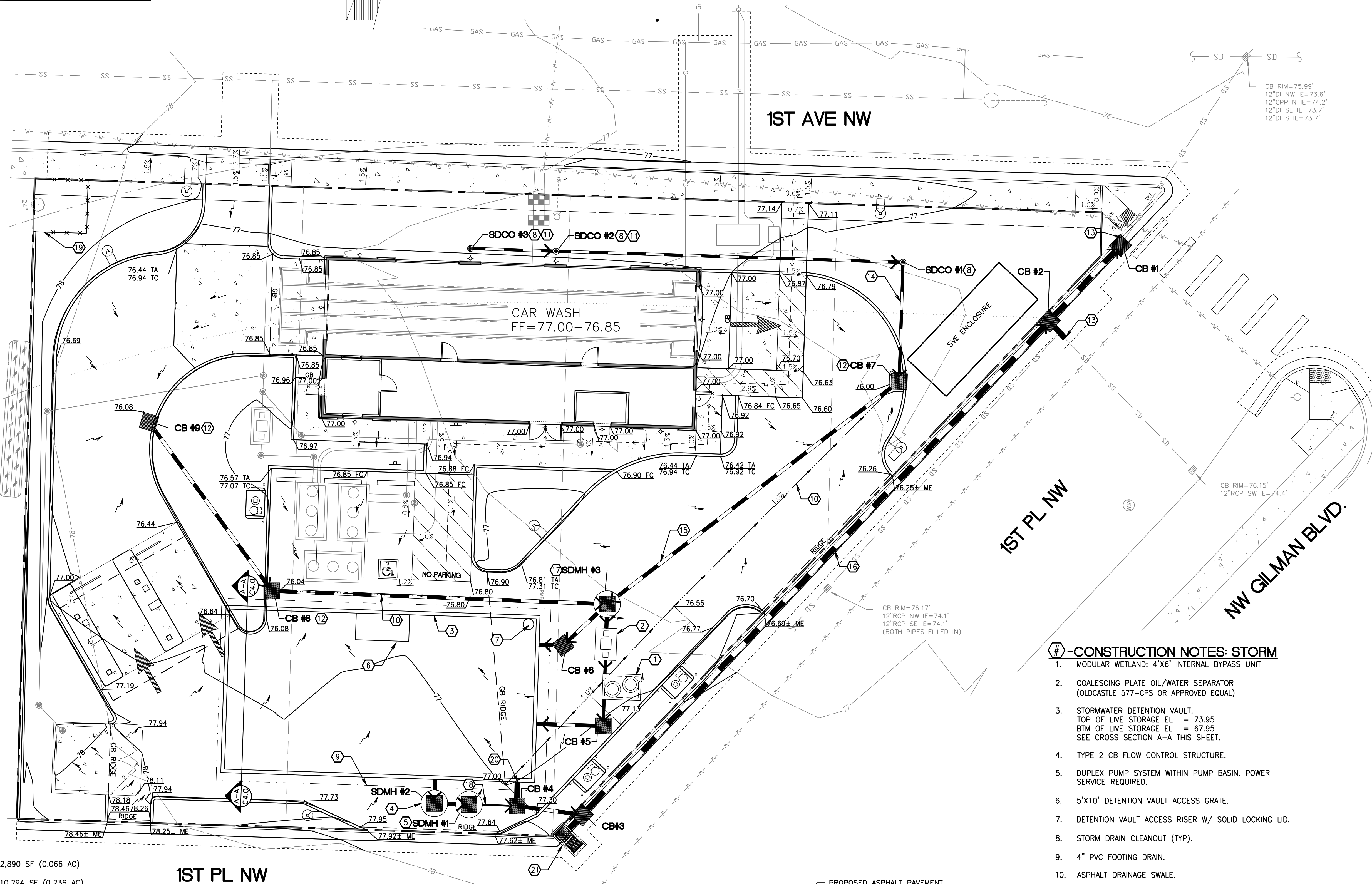
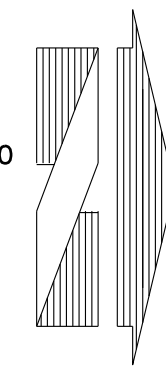
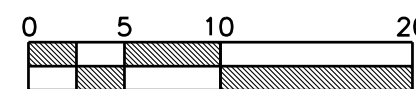
BROWN BEAR CAR WASH

SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON

ACCESSIBLE PATH OF TRAVEL NOTE:

WALKWAYS ALONG ACCESSIBLE ROUTES OF TRAVEL SHALL BE CONTINUOUSLY ACCESSIBLE, BE A MINIMUM OF 44" IN WIDTH, HAVE A MAXIMUM 1.5% CROSS SLOPE, AND SHALL HAVE RAMPS COMPLYING WITH ACCESSIBILITY STANDARDS (SECTION 405) WHERE NECESSARY TO CHANGE ELEVATION AT A LONGITUDINAL SLOPE EXCEEDING 5% (1:20).

1"=10'



IMPERVIOUS AREA CALCULATIONS

DETAINED BASIN AREA (ON-SITE):

NEW AND REPLACED IMPERVIOUS/PERVIOUS AREAS

BUILDINGS:	2,890 SF (0.066 AC)
DRIVING SURFACE, CONC. WALKWAYS, CURBS:	10,294 SF (0.236 AC)
TOTAL NEW AND REPLACED IMPERVIOUS:	13,184 SF (0.302 AC)
TOTAL PGIS	8,929 SF (0.204 AC)
TOTAL NPGIS	4,255 SF (0.098 AC)

LANDSCAPE:	5,247 SF (0.120 AC)
TOTAL DETAINED BASIN AREA:	18,431 SF (0.423 AC)

BYPASS BASIN AREA (ROW):

NEW AND REPLACED IMPERVIOUS AREAS (BYPASS)

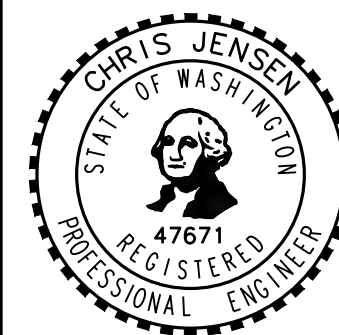
DRIVING SURFACE, SIDEWALKS, CURB AND GUTTER:	3,226 SF (0.074 AC)
TOTAL PGIS:	1,036 SF (0.024 AC)
TOTAL NPGIS:	2,190 SF (0.05 AC)

LANDSCAPE AREA (BYPASS):	67 SF (0.001 AC)
TOTAL BYPASS BASIN AREA:	3,293 SF (0.075 AC)

TOTAL PROJECT BASIN AREA: 18,431 SF + 3,293 SF = 21,724 SF (0.499 AC)

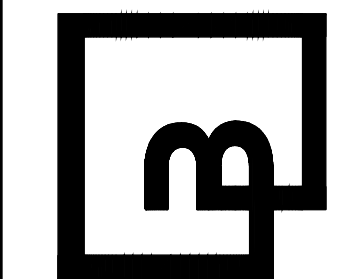
#-CONSTRUCTION NOTES: STORM

- MODULAR WETLAND: 4'X6' INTERNAL BYPASS UNIT
- COALESCING PLATE OIL/WATER SEPARATOR (OLDCASTLE 577-CPS OR APPROVED EQUAL)
- STORMWATER DETENTION VAULT.
TOP OF LIVE STORAGE EL = 73.95
BTM OF LIVE STORAGE EL = 67.95
SEE CROSS SECTION A-A THIS SHEET.
- TYPE 2 CB FLOW CONTROL STRUCTURE.
- DUPLEX PUMP SYSTEM WITHIN PUMP BASIN. POWER SERVICE REQUIRED.
- 5'X10' DETENTION VAULT ACCESS GRATE.
- DETENTION VAULT ACCESS RISER W/ SOLID LOCKING LID.
- STORM DRAIN CLEANOUT (TYP).
- 4" PVC FOOTING DRAIN.
- ASPHALT DRAINAGE SWALE.
- ROOF DOWNSPOUT CONNECTION. CONFIRM LOCATION WITH PLUMBING PLANS.
- TYPE 1 CATCH BASIN (TYP).
- CONNECTION TO EXISTING STORM SYSTEM.
- 6" PVC @1% MIN (TYP).
- 8" PVC @0.5% MIN (TYP).
- 12" PVC @0.5% MIN (TYP).
- FLOW SPLITTER.
- 2" PRESSURIZED PUMP DISCHARGE PIPE.
- INSTALL TEMPORARY 6" HIGH CHAINLINK FENCE AROUND TREE DRIPLINE. REMOVE AFTER GRADING ACTIVITIES.
- SECONDARY VAULT OVERFLOW TO CB#4.
- CONTECH STORMFILTER CONCRETE CATCH BASIN.

PRELIMINARY - ENTITLEMENTS
NOT FOR CONSTRUCTIONKnow what's below.
Call before you dig.
Dial 811For: CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107

4/3/2020

Scale:	Horizontal 1" = 10'	Vertical NA
Designed	ADW	ADW
Drawn	ADW	ADW
Checked	ADW	ADW
Approved	ADW	ADW
Date	11/15/19	

Barghausen
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Kent, WA 98032
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Sheet
C4.0 of 8

1"=10'

0 5 10 20



1. RECLAIM TANK #1
OLD CASTLE PRECAST TANK 5106-SA
W/ FIBRELITE FL COVERS
2. RECLAIM TANK #2
OLD CASTLE PRECAST 1500 GAL RECLAIM TANK
3. RECLAIM TANK #3
OLD CASTLE PRECAST 1500 GAL RECLAIM TANK
4. OLDCASTLE OIL/WATER 660-CPS SEPARATOR
TANK
WITH HS20 RATED LID
5. VENT LINE TO BUILDING.
SEE CAR WASH PLANS FOR CONTINUATION.
6. 2"-2" RECLAIM LINES FROM TANK #2 BACK TO
CAR WASH. SEE CAR WASH PLANS FOR
CONTINUATION.
7. PROPOSED CONNECTION TO EXISTING SEWER MAIN
PER CITY OF ISSAQUAH STANDARD DETAIL S-10.
8. CAP EXISTING SIDE SEWER AT SEWER MAIN.
9. SSCO W/ SOLID LOCKING LID (TYP).
10. SSCO W GRATED, TRAFFIC RATED LID (TYP).
11. 6" PVC @2% MIN (TYP).

1. 1" LANDSCAPE IRRIGATION METER WITH DOUBLE CHECK VALVE ASSEMBLY. RE-USE EXISTING DOMESTIC SERVICE METER. INSTALL NEW DCVA.
2. PROPOSED 1-1/2" WATER METER AND INSTALL NEW REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) TO SERVICE THE CAR WASH FACILITY. RPBA SHALL BE PER THE WASHINGTON STATE DEPT. OF HEALTH MOST CURRENT LIST OF ACCEPTED CROSS-CONNECTION CONTROL ASSEMBLIES. RPBA IS TO BE ELECTRICALLY HEATED AND ABOVE GROUND ENCLOSE IS TO MEET ASSE 1060 CLASS 1 CERTIFICATION. METER, TAP, AND SERVICE TO BE INSTALLED BY CITY OF ISSAQUAH.
3. 7 LF 1-1/2" DOMESTIC WATER SERVICE LINE.
4. WATER SERVICE CONNECTIONS TO PROPOSED BUILDING. SEE PLUMBING PLANS FOR CONTINUATION. CONTRACTOR TO VERIFY EXACT POINT OF CONNECTION WITH PLUMBING PLANS. SEE PLUMBING PLANS FOR BACKFLOW PREVENTION WITHIN BUILDING.

ALL WATER METERS, HYDRANTS, AND APPURTENANCES
SHALL BE PROTECTED FROM CONTINUING
CONSTRUCTION ACTIVITIES WITH ORANGE PLASTIC
TEMPORARY FENCING.

EXISTING WATER FEATURES SUCH AS METERS, HYDRANTS,
AND APPURTENANCES SHALL BE PROTECTED FROM
CONSTRUCTION ACTIVITIES BY THE INSTALLATION OF ORANGE,
TEMPORARY FENCING.

CONTRACTOR TO MAINTAIN MINIMUM 1.5' VERTICAL SEPARATION BETWEEN UTILITIES AND PROPOSED SANITARY SEWER LINE/STORM DRAIN LINE, AND WATER SERVICE LINES.

GAS UTILITY:	PUGET SOUND ENERGY 355 110TH AVE NE BELLEVUE, WA 98004 TELEPHONE: (1-888-321-7779)
ELECTRICAL:	PUGET SOUND ENERGY 355 110TH AVE NE BELLEVUE, WA 98004 TELEPHONE: (1-888-321-7779)
TELEPHONE:	CENTURYLINK 23315 - 66TH AVENUE SOUTH KENT, WA 98032 TELEPHONE: 1-(800) 871-9244
SANITARY SEWER:	CITY OF ISSAQUAH 1775 12TH AVE NW PO BOX 1307 ISSAQUAH, WA 98027 PHONE: (425) 837-3400 PWE@ISSAQUAHWA.GOV
WATER:	CITY OF ISSAQUAH 1775 12TH AVE NW PO BOX 1307 ISSAQUAH, WA 98027 PHONE: (425) 837-3400 PWE@ISSAQUAHWA.GOV
STORMWATER:	CITY OF ISSAQUAH 1775 12TH AVE NW PO BOX 1307 ISSAQUAH, WA 98027 PHONE: (425) 837-3400 PWE@ISSAQUAHWA.GOV

1. LOCATION OF POWER SERVICE CONNECTION TO BUILDING, CONTRACTOR TO COORDINATE WITH PSE FOR TRANSFORMER LOCATION AND VERIFY SCOPE OF WORK WITH MEP/PURVEYOR PRIOR TO CONSTRUCTION.
2. APPROXIMATE LOCATION OF TELECOMMUNICATIONS/CABLE SERVICE TO BUILDING, CONTRACTOR TO COORDINATE CONDUIT SIZE, QUANTITY, LOCATION, AND SCOPE OF WORK WITH MEP/PURVEYOR PRIOR TO CONSTRUCTION.
3. APPROXIMATE LOCATION OF PHONE SERVICE TO BUILDING. CONTRACTOR SCOPE OF WORK SHALL INCLUDE TRENCH EXCAVATION AND LAYING CONDUIT (MINIMUM ONE 4" CONDUIT). CENTURYLINK TO PULL WIRE AND CONNECT TERMINAL/CIRCUIT.
4. APPROXIMATE LOCATION OF GAS SERVICE TO BUILDING.
5. APPROXIMATE LOCATION OF CONNECTION TO EXISTING TELECOMMUNICATIONS/CABLE SERVICE.
6. PROPOSED TRANSFORMER, AND CONNECTION TO EXISTING POWER.
7. APPROXIMATE LOCATION OF CONNECTION TO EXISTING GAS SERVICE. PUGET SOUND ENERGY TO INSTALL PROPOSED GAS LINE WITHIN ROW AT PROPOSED POINT OF CONNECTION, CONTRACTOR TO DIG TRENCH AND INSTALL ASSOCIATED ON-SITE PIPING. CONTRACTOR TO CONTACT PSE PRIOR TO CONSTRUCTION.
8. ELECTRICAL SERVICE TO BE PROVIDED TO THE RPBA HOTBOX.
9. SAWCUT AND ASPHALT PATCH BACK PER CITY OF ISSAQUAH STANDARD DETAIL NO. T-4B.
10. APPROXIMATE LOCATION OF AS/SVE WELL (TYP).
11. AS/SVE ENCLOSURE.
12. AS/SVE CONDUIT PIPING (TYP).

THE CIRCLED LOCATIONS ARE REQUIRED TO BE POTHOLED TO VERIFY VERTICAL AND HORIZONTAL LOCATION OF EXISTING UTILITY AND/OR POTENTIAL CONFLICTS WITH EX. UTILITIES. POTHOLING SHOULD OCCUR PRIOR TO INSTALLING ANY PROPOSED UTILITIES. CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. OF ANY CONFLICTS.

CONTRACTOR TO ORDER LOCATES AND FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION TO ENSURE THAT UTILITY CONFLICTS DO NOT EXIST. CONTRACTOR TO REVIEW UTILITY ASBLUTS IN ORDER TO VERIFY EXISTING UTILITY LOCATIONS. CONTRACTOR SHALL POTHOLE ALL POTENTIAL UTILITY CONFLICTS PRIOR TO CONSTRUCTION. NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC OF ANY CONFLICTS.

PRELIMINARY - ENTITLEMENTS
NOT FOR CONSTRUCTION



Know what's **below**.
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2	4/3/2020	ADW	AEM	CRJ	PER CITY REVIEW COMMENTS RECEIVED 02/19/2020
1	11/15/19	ADW	AEM	CRJ	
LAND USE SUBMITTAL					
No.	Date	By	Ckd.	Appr.	Revision

Title:


For: CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107



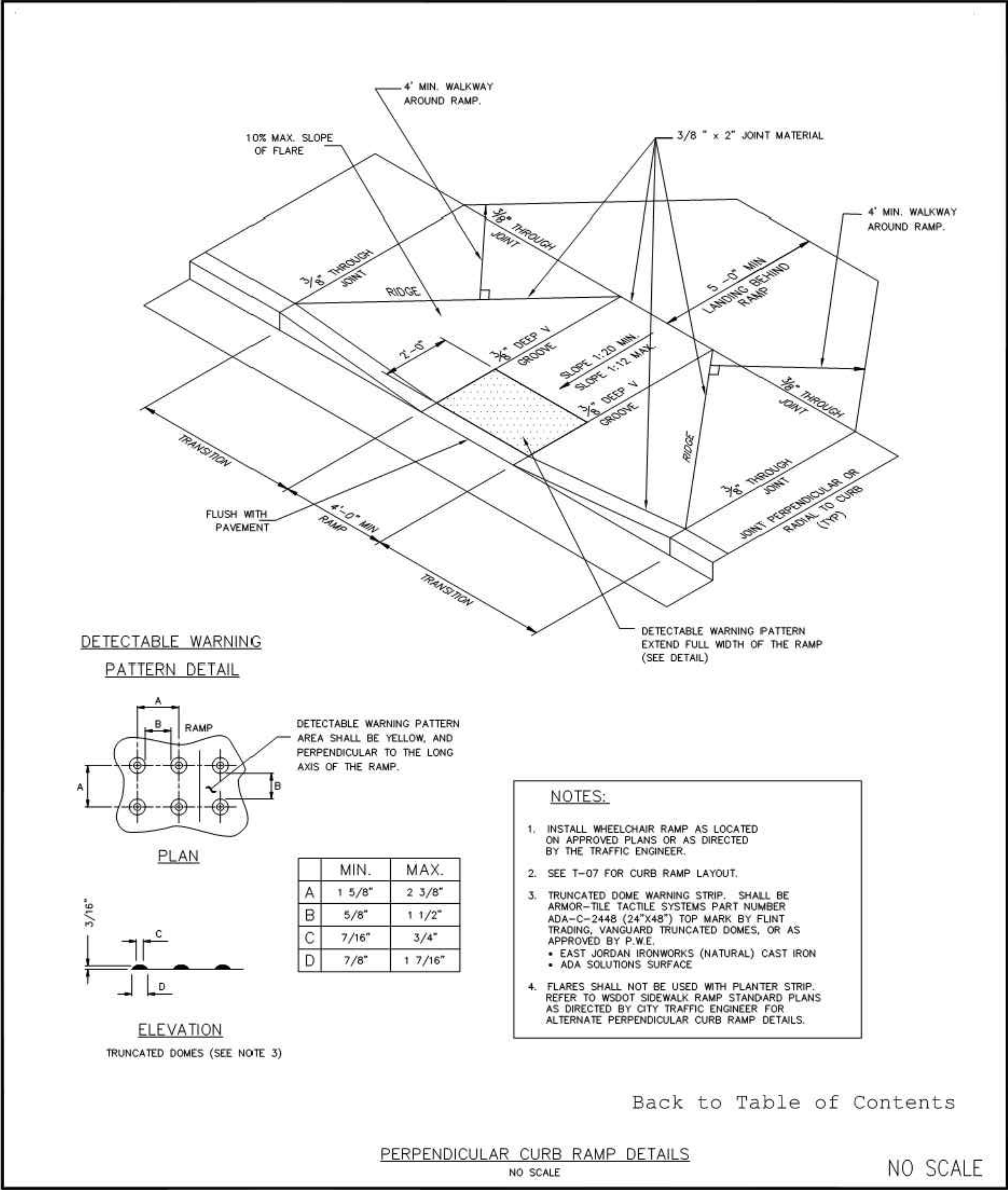
4/3/2020

Designed	ADW	Scale: Horizontal 1" = 10' Vertical NA
Drawn	ADW	
Checked	AEM	
Approved	CRJ	
Date	11/15/19	

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Kent, WA 98032
425.251.6222 **barghausen.com**

Job Number	20693	Sheet	5.0 of 8
			

AGENCY DETAILS
FOR
BROWN BEAR CAR WASH
SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



CITY OF ISSAQUAH
PUBLIC WORKS DEPARTMENT
AUGUST 2010

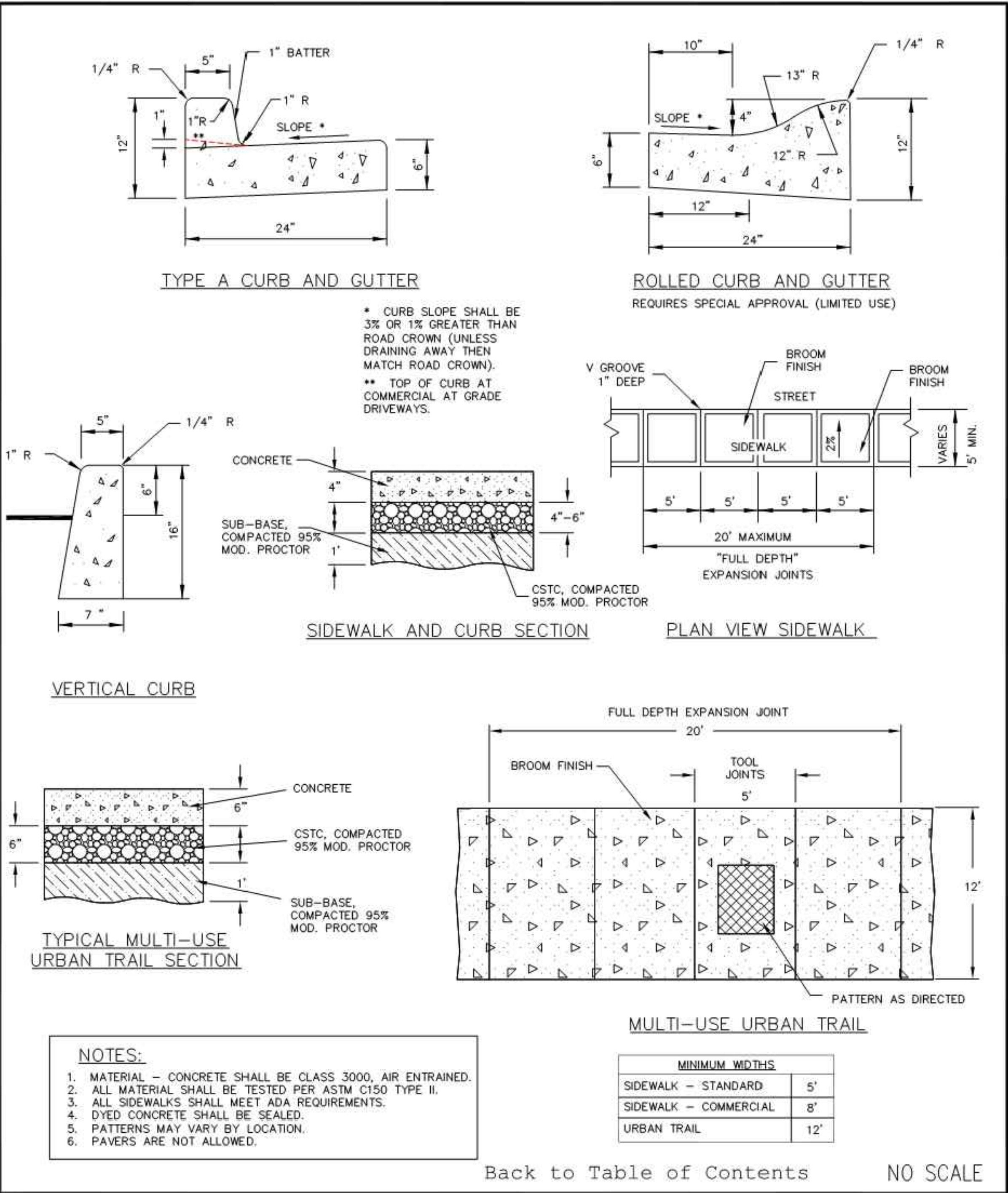
CHRIS JENSEN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
47671
4/3/2020

PERPENDICULAR CURB RAMP (2 OF 2)

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STANDARD DETAIL NO. T-08

REV:



CITY OF ISSAQUAH
PUBLIC WORKS DEPARTMENT
AUGUST 2010

CHRIS JENSEN
STATE OF WASHINGTON
REGISTERED PROFESSIONAL ENGINEER
47671
4/3/2020

SIDEWALKS/CURBS/URBAN TRAILS

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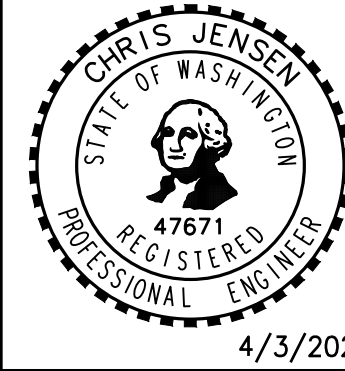
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REV:

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1	11/15/19	ADW	AEM	CRJ	ADW	AEM	CRJ	LAND USE SUBMITTAL
No.	Date	By	Chd.	Appr.	No.	Date	By	Chd.

AGENCY DETAILS
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

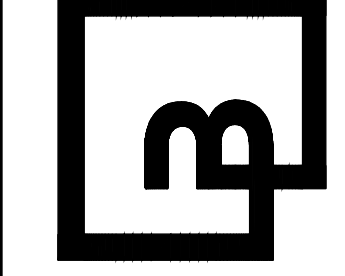
For: CAR WASH ENTERPRISES, INC.
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SEATTLE, WASHINGTON 98107



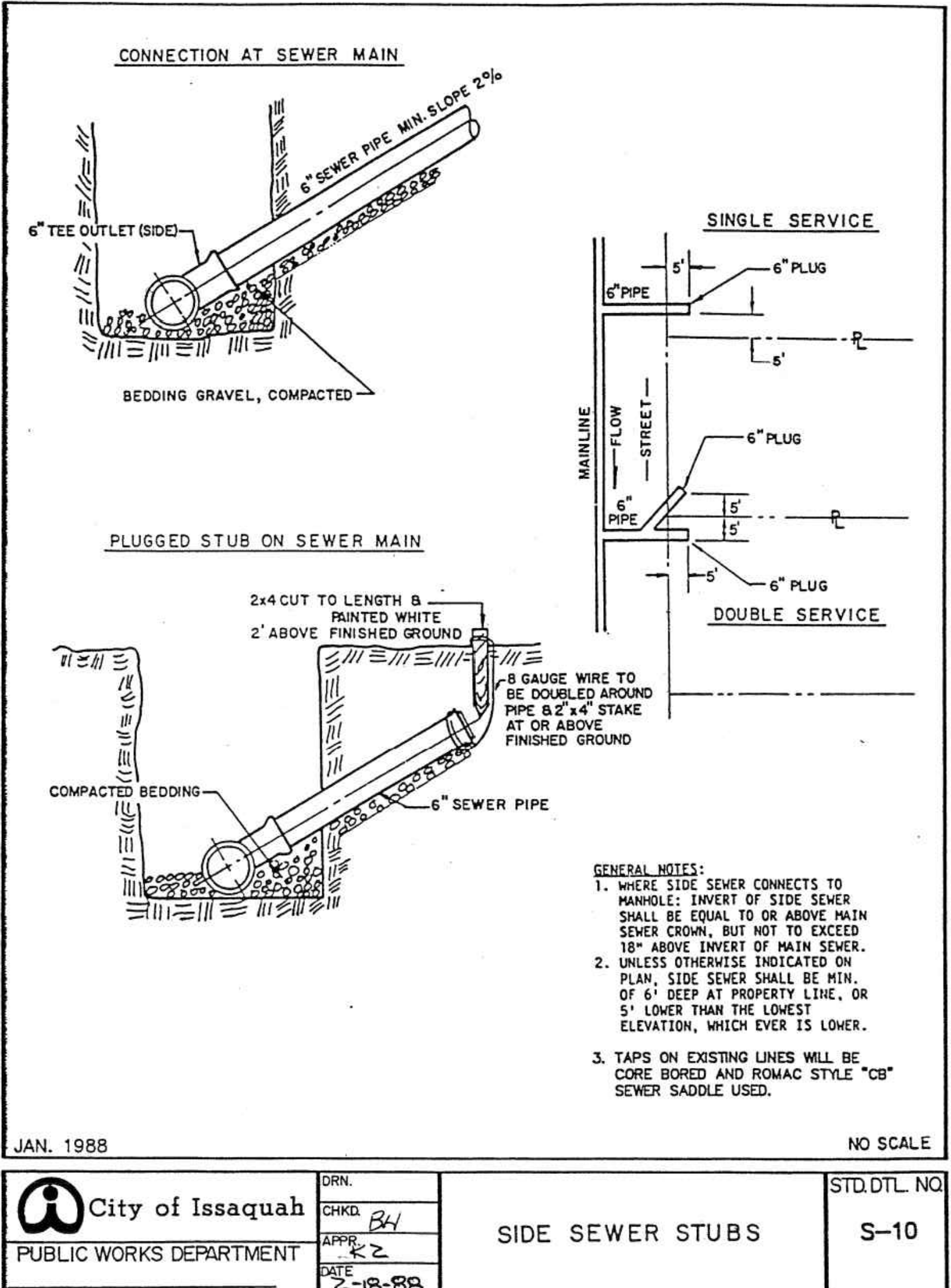
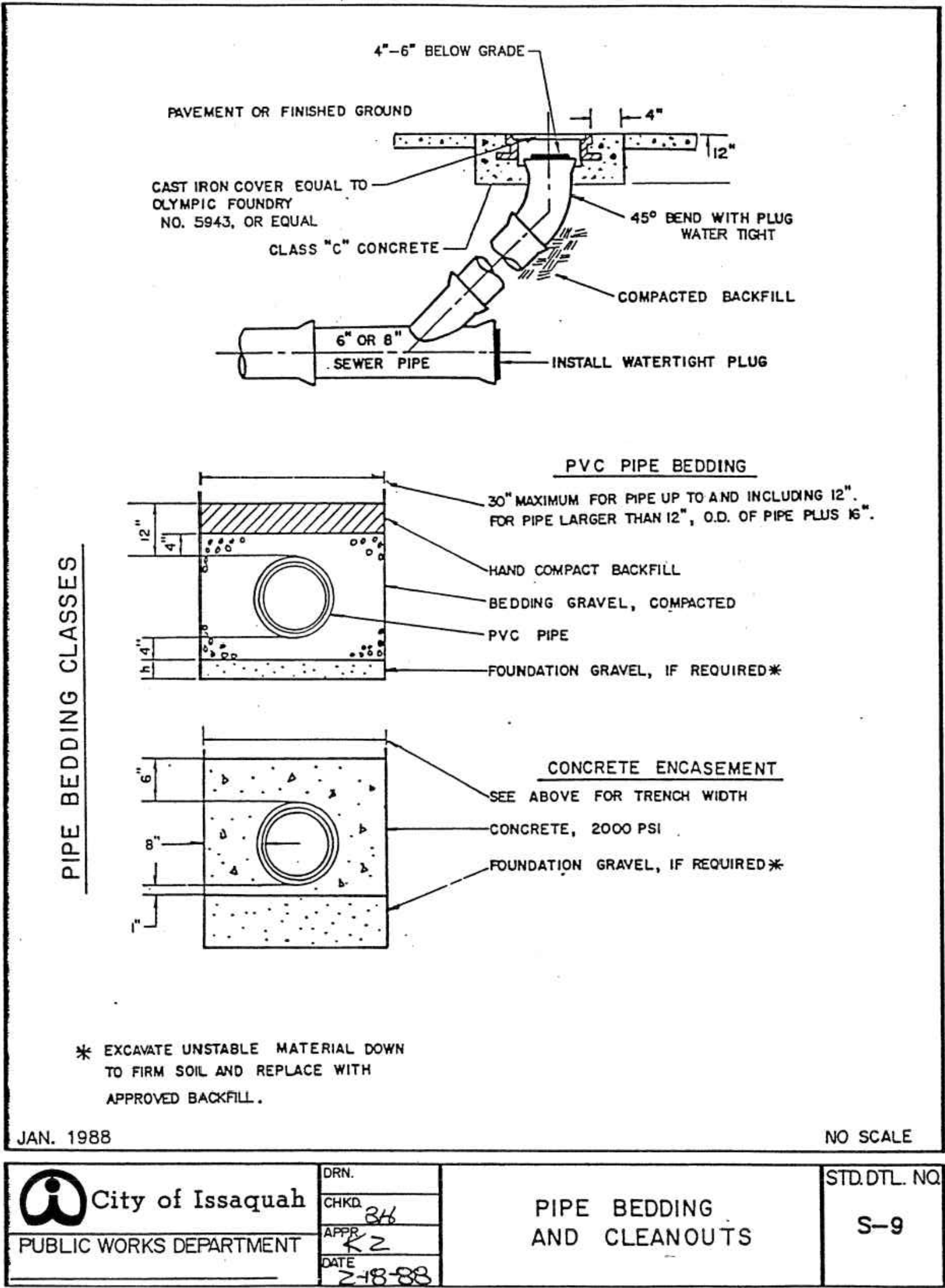
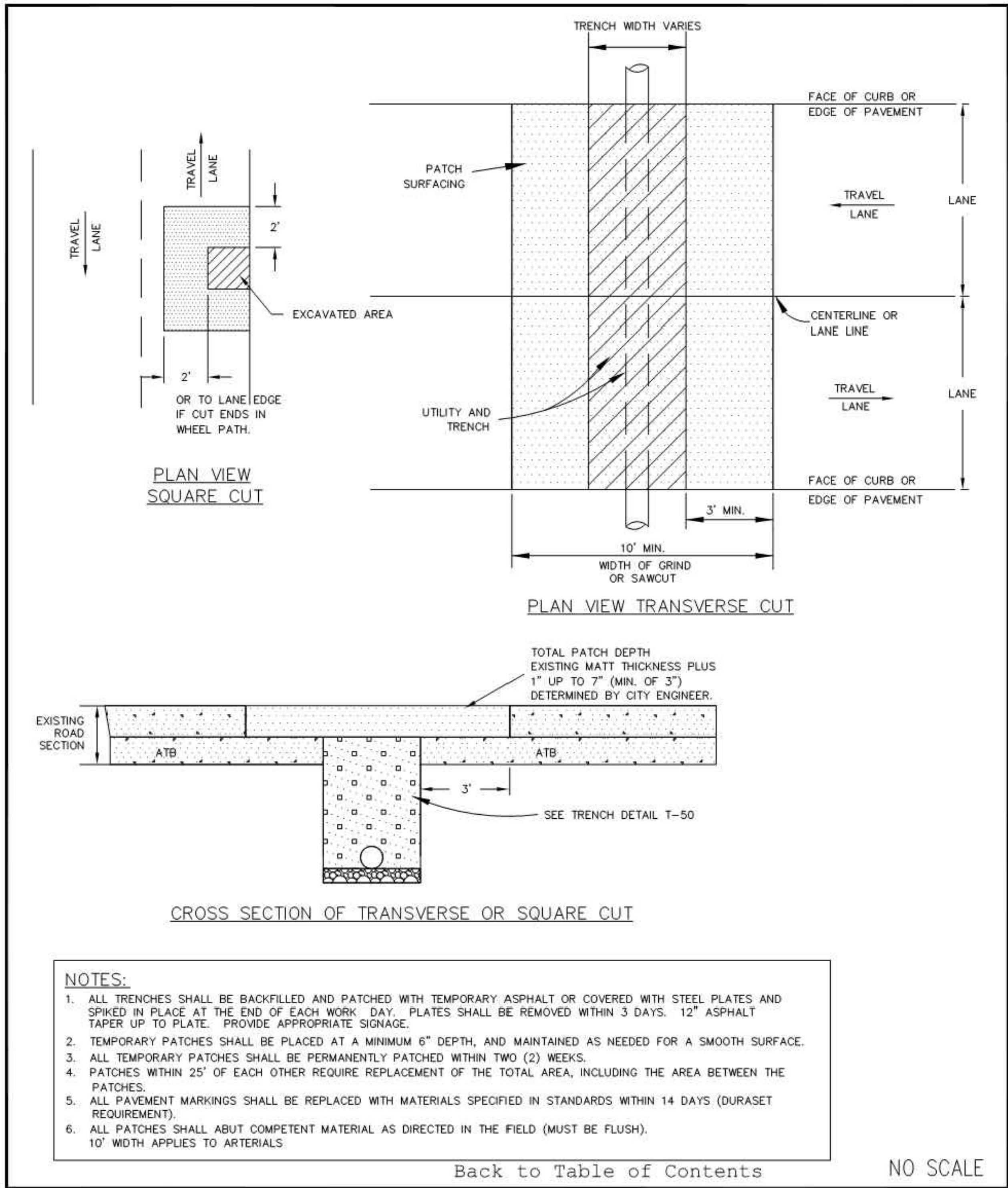
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AGENCY DETAILS
FOR
BROWN BEAR CAR WASH
SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



CITY OF ISSAQUAH
PUBLIC WORKS DEPARTMENT
AUGUST 2010

EXPIRES: 12-13-2011

PATCHING FLEXIBLE PAVEMENTS
TRANSVERSE OR SQUARE CUTS
T-48

STANDARD
DETAIL NO.
T-48

REV:

No.	Date	By	Chd.	Appr.	PER CITY REVIEW COMMENTS RECEIVED 02/19/2020	LAND USE SUBMITAL
1	11/15/19	ADW	ADW	ADW		
2	4/3/2020	ADW	ADW	ADW		

AGENCY DETAILS
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

For: CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107



Scale:	Horizontal	Vertical
	NA	NA
Designed	ADW	ADW
Drawn	ADW	ADW
Checked	ADW	ADW
Approved	ADW	ADW
Date	11/15/19	11/15/19

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8

PRELIMINARY PLANTING PLAN

FOR

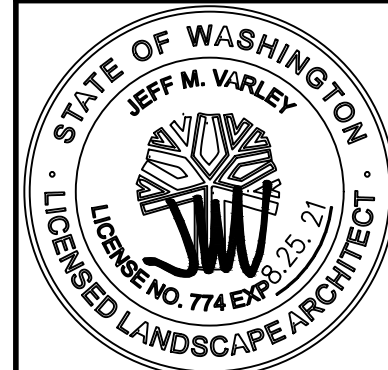
BROWN BEAR CAR WASH

SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON

ATTACHMENT 6

PRELIMINARY PLANTING PLAN
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

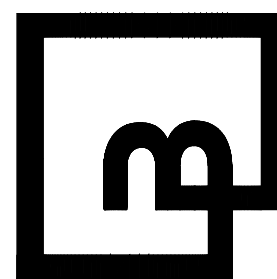
For: CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107



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Designed: TR Drawn: TR
Checked: JMW Approved: JMW
Date: 10/06/19

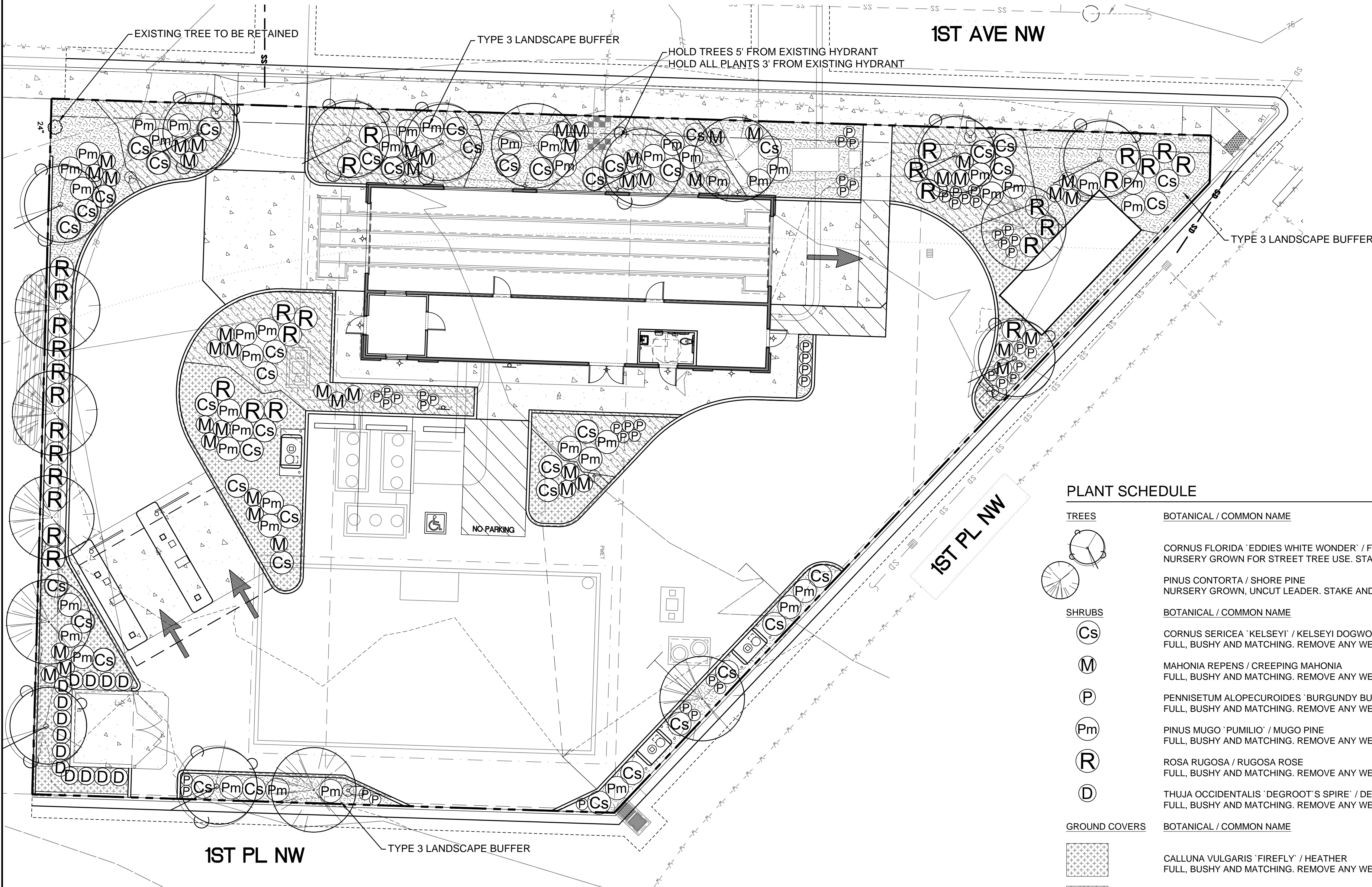
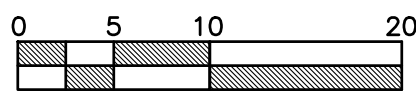
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18215 72nd Avenue South
Kent, WA 98032
425.251.6222 barghausen.com



Job Number
20693

Sheet

L1 of 6



PLANT SCHEDULE

TREES

BOTANICAL / COMMON NAME

CONT.

SIZE

QTY

CORNUS FLORIDA 'EDDIES WHITE WONDER' / FLOWERING DOGWOOD
NURSERY GROWN FOR STREET TREE USE. STAKE AND GUY FOR ONE SEASON.

B & B

1.5" CAL, MIN 6' HT

10

PINUS CONTORTA / SHORE PINE
NURSERY GROWN, UNCUT LEADER. STAKE AND GUY FOR ONE SEASON.

B & B

2" CAL., MIN. 10' HT.

9

SHRUBS

BOTANICAL / COMMON NAME

CONT.

WATER USE

SPACING

QTY

CORNUS SERICEA 'KELSEYI' / KELSEYI DOGWOOD
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL. MIN.

LOW

48" o.c.

44

MAHONIA REPENS / CREEPING MAHONIA
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL.

LOW

36" o.c.

45

PENNISETUM ALOPECUROIDES 'BURGUNDY BUNNY' / BURGUNDY BUNNY DWARF FOUNTAIN GRASS
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL.

LOW

24" o.c.

44

PINUS MUGO 'PUMILIO' / MUGO PINE
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

2 GAL. MIN.

LOW

48" o.c.

47

ROSA RUGOSA / RUGOSA ROSE
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

2 GAL. MIN.

LOW

48" o.c.

32

THUJA OCCIDENTALIS 'DEGROOT'S SPIRE' / DEGROOT'S SPIRE ARBORVITAE
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

6' MIN HT

LOW

36" o.c.

14

GROUND COVERS

BOTANICAL / COMMON NAME

CONT.

WATER USE

SPACING

QTY

CALLUNA VULGARIS 'FIREFLY' / HEATHER
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL.

LOW

18" o.c.

367

LIRIOPE SPICATA 'BIG BLUE' / CREEPING LILY TURF
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL.

LOW

18" o.c.

551

RUBUS PENTALOBUS 'EMERALD CARPET' / BRAMBLE
FULL, BUSHY AND MATCHING. REMOVE ANY WEEDS FROM POT BEFORE PLANTING.

1 GAL.

LOW

18" o.c.

442

MINIMUM TREE DENSITY REQUIREMENTS

COMMERCIAL, RETAIL AND FACILITIES = 4 SIGNIFICANT TREES PER 5,000 SF

18,431 SF / 5,000 SF = 3.68

3.68 X 4 = 14.7

14.7 - 1 SIGNIFICANT TREE RETAINED = 13.7 TREES REQUIRED

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

PRELIMINARY PLANTING PLAN
FOR
BROWN BEAR CAR WASH
SE ¼ OF NE ¼ OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH TOPSOIL, TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 90-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK AND HAVE A MINIMUM OF FIVE (5) YEAR'S EXPERIENCE INSTALLING SIMILAR WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
SAVE AND PROTECT ALL EXISTING PLANTINGS SHOWN TO REMAIN. DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. IF AN IRRIGATION SYSTEM IS TO BE INSTALLED DO NOT PLANT UNTIL THE SYSTEM HAS BEEN INSTALLED, TESTED, AND APPROVED BY THE OWNER. HANDLE PLANTS WITH CARE. DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST TO THE OWNER.

REPAIR OF EXISTING PLANTINGS:
DURING THE COURSE OF WORK, REPAIR ALL EXISTING PLANTING AREAS BY PRUNING DEAD GROWTH, RE-ESTABLISHING FINISH GRADE AND RE-MULCHING TO SPECIFIED DEPTH.

GUARANTEE:
GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE JOB BY OWNER.

90-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 90 DAYS FOLLOWING COMPLETION OF PROJECT (ACCEPTANCE) OF FACILITY BY OWNER. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

SUBMITTALS:
SUBMIT TWO (2) COPIES THE FOLLOWING TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO THE START OF ANY WORK:
A) DOCUMENTATION THAT ALL PLANT MATERIAL HAS BEEN ORDERED AND PHOTOS OF THE PRIMARY PLANT MATERIAL SUCH AS TREES. PHOTOS SHALL BE PROVIDED PRIOR TO DELIVERY. LANDSCAPE ARCHITECT AND OWNER RESERVE THE RIGHT TO REJECT ANY SUBSTANDARD PLANT MATERIAL THAT DOES NOT COMPLY WITH THESE SPECIFICATIONS. REJECTED PLANT MATERIAL SHALL BE RETURNED AT NO COST TO OWNER.
B) TOPSOIL ANALYSIS AND RECOMMENDED AMENDMENTS.
C) TREE STAKING AND CUYING MATERIALS.
D) ONE (1) QUART SIZE OF TOPSOIL AND MULCH.
E) PLANTING SCHEDULE INCLUDING DATES AND TIMES.
F) MAINTENANCE INSTRUCTIONS FOR ONE (1) FULL YEAR.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-1996). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT. "B & B" INDICATES BALLED AND BURLAPPED; "CONT." INDICATES CONTAINER; "BR" INDICATES BARE ROOT; "CAL" INDICATES CALIPER AT 6" ABOVE SOIL LINE; "GAL" INDICATES GALLON.
A) SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE AND ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.
B) QUALITY:
PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION, PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER, SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESICCATION. PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY, HAVE MULTIPLE LEADERS OR "Y" CROTCHES LESS THAN 30 DEGREES IN TREES, OR DO NOT MEET SIZE OR ANSI STANDARDS WILL BE REJECTED. PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.
C) SUBSTITUTION:
NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED. SUBSTITUTIONS MAY REQUIRE SUBMITTAL TO REVISED LANDSCAPE PLAN TO CITY FOR APPROVAL.
D) LANDSCAPE CONTRACTOR SHALL PROVIDE THE LANDSCAPE ARCHITECT THE SCHEDULE FOR PLANT DELIVERY. PROVIDE ONE WEEK NOTICE FOR PLANT DELIVERY SCHEDULE. LANDSCAPE ARCHITECT TO BE PRESENT FOR ALL PLANT DELIVERIES.

SOIL PREPARATION:
TOPSOIL, AMENDMENT, AND BACKFILL, ARE GENERAL REQUIREMENTS FOR ALL LANDSCAPE AREAS, UNLESS NOTED OTHERWISE ON THE PLANS. SOIL AMENDMENTS AND FERTILIZER NOTED BELOW ARE TO BE USED FOR BID PRICE BASIS ONLY. SPECIFIC AMENDMENTS AND FERTILIZERS WILL BE MADE AFTER SOIL SAMPLES ARE LABORATORY TESTED BY THE CONTRACTOR. PROVIDE CHANGE ORDER FOR ADDITIONAL OR REDUCTION OF MATERIALS REQUIRED OR NOT REQUIRED BY THE SOILS REPORT.

SOIL FERTILITY AND AGRICULTURAL SUITABILITY ANALYSIS:
AFTER ROUGH GRADING AND PRIOR TO SOIL PREPARATION, CONTRACTOR TO OBTAIN TWO REPRESENTATIVE SOIL SAMPLES, FROM LOCATIONS AS DIRECTED BY THE LANDSCAPE ARCHITECT, TO A TESTING LABORATORY. SUBMIT RESULTS TO LANDSCAPE ARCHITECT FOR REVIEW. TESTS TO INCLUDE FERTILITY AND SUITABILITY ANALYSIS WITH WRITTEN RECOMMENDATIONS FOR SOIL AMENDMENT, FERTILIZER, CONDITIONERS, APPLICATION RATES, AND POST-CONSTRUCTION MAINTENANCE PROGRAM. TESTS TO BE CONTRACTED WITH AND PAID FOR BY THE CONTRACTOR.

A) TOPSOIL:
CONTRACTOR IS RESPONSIBLE FOR SUPPLYING ALL TOPSOIL AND FOR DETERMINING THE VOLUME OF TOPSOIL REQUIRED PER THE INFORMATION ON PLANS AND NOTED HERE-IN. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY WEED CONTROL RESULTING FROM CONTAMINATED OFF SITE SOURCES.
B) TOPSOIL TO CONSIST OF WINTER MIX AS PRODUCED AND REMIXED BY PACIFIC TOPSOILS, INC. WINTER MIX TO CONSIST OF 1/3 BY VOLUME SANDY LOAM, 1/3 BY VOLUME COMPOSTED GARDEN MULCH, AND 1/3 BY VOLUME COARSE WASHED SAND OR EQUIVALENT. AT MINIMUM, TOPSOIL PRODUCTS BROUGHT ON SITE TO CONTAIN AMENDMENTS AS LISTED IN "C".
C) TOPSOIL TO INCLUDE THE FOLLOWING AMENDMENTS AS NECESSARY:
THE FOLLOWING AMOUNT PER 1,000 SQUARE FEET:
1. 6-CUBIC YARDS ORGANIC COMPOST. COMPOST TO BE FREE OR NON-FARM ANIMAL SOURCES, NOR TO BE FROM SOURCES CONTAINING REDWOOD OR CEDAR PRODUCTS.
2. 30-POUNDS NITROFORM (38-0-0)
3. 5-POUNDS AMMONIUM SULFATE
4. 40-POUNDS CALCIUM CARBONATE LIMESTONE
5. 40-POUNDS DOLOMITE LIMESTONE
6. 5-OUNES BORON (AS BORAX)
ALL AMENDMENTS TO BE THOROUGHLY MIXED PRIOR TO INCORPORATION INTO TOPSOIL.

D) PLANTING BACKFILL FOR ALL TREES, SHRUBS, AND GROUNDCOVERS:
1. 0.6-CUBIC YARDS PER VOLUME TOPSOIL
2. 0.4-CUBIC YARDS ORGANIC COMPOST.
3. 3-POUNDS NITROFORM (38-0-0)
4. 1-POUNDS AMMONIUM SULFATE
5. 2-POUNDS CALCIUM CARBONATE LIMESTONE
6. 2-POUNDS DOLOMITE LIMESTONE
E) TOPSOIL PREPARATION AND INSTALLATION. SEE CITY OF ISSAQUAH STANDARD DETAIL FOR TOPSOIL PLACEMENT AND INSTALLATION.

BARK MULCH (TOPDRESSING):
ONE-HALF-INCH (1/2") SIZE, TO ONE-QUARTER (1/4"), I.E., "FINE," HEMLOCK/FIR BARK.

STAKES:
2-INCH DIAMETER BY 8-FOOT MINIMUM LODGEPOLE PINE STAKES.

GUY MATERIAL:
1-INCH WIDE POLYETHYLENE CHAIN LOCK TYPE TIES; OR, 3/8" DIAMETER RUBBER. NO WIRE.

ROOT BARRIER:
PROVIDE ROOT BARRIER AT STREET TREES DEEP ROOT - TREE ROOT GUIDES - PRODUCT #UB 24-2. INSTALL PER MANUFACTURERS WRITTEN SPECIFICATIONS. DEEP ROOT PARTNERS LP (415) 781-0700. WWW.DEEPROOT.COM. OR APPROVED EQUAL. SEE CITY OF ISSAQUAH STANDARD STREET TREE DETAIL THIS SET.

LAWN:
COMMERCIAL SEED TOLERANT OF LOCAL CLIMATE

HERBICIDE:
HERBICIDE IS NOT RECOMMENDED FOR THE FIRST YEAR AFTER INSTALLATION.

ANTI-DESICCANT:
"WILT-PROOF," 48 HOURS PRIOR TO SHIPMENT TO SITE FROM JUNE 1 THROUGH SEPTEMBER. THOROUGHLY ROOT WATER PLANTS PRIOR TO DELIVERY. PLANT MATERIAL DELIVERED TO SITE TO BE KEPT CONTINUALLY MOIST THROUGH INSTALLATION.

EXECUTION:
PRE-CONSTRUCTION MEETING:
ONCE CONTRACT HAS BEEN AWARDED, LANDSCAPE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH LANDSCAPE ARCHITECT. PROVIDE ONE WEEK NOTICE FOR MEETING.

FINISH GRADES:
FINE GRADE AND REMOVE ROCKS AND FOREIGN OBJECTS OVER 2 INCHES DIAMETER FROM TOP SURFACE OF PREPARED LANDSCAPE AREAS. FINISH ELEVATIONS TO BE DEFINED AS 3 INCHES BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL PLANTING BED AREAS AND 1-INCH BELOW CURBS, WALKS AND/OR OTHER ADJACENT HARDSCAPE FOR ALL LAWN AREAS. FINISH GRADE REFER TO GRADES PRIOR TO INSTALLATION OF MULCH OR LAWN.
ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS.

TREES AND SHRUBS:
ARRANGE TREES AND SHRUBS ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES, SHRUBS, AND SUPPORTS TO STAND VERTICAL. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

GROUNDCOVERS:
EXCAVATE PITS TO A MINIMUM OF 3 INCHES BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:
MULCH ALL LANDSCAPE AREAS NOT COVERED BY LAWN AND/OR SEED. APPLY SUFFICIENT QUANTITY TO PROVIDE A MINIMUM OF 2-INCH DEPTH, UNLESS OTHERWISE NOTED.

UTILITY CLEARANCES:
FIELD ADJUST PLANT LOCATIONS FOR 8-FOOT SEPARATION OF TREES/SHRUBS AND 2-FOOT SEPARATION FOR GROUNDCOVER FROM FIRE HYDRANTS AND UTILITY VAULTS.

PLANTING MAINTENANCE:
CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTling PLANTS TO PROPER GRADES OR POSITION, RE-ESTABLISHING SETTLED GRADES, AND MOWING LAWNS WEEKLY AFTER LAWN ESTABLISHMENT. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION. INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Revision
Revised Per Comments

Appr.

Cd.

By

Date

No.

Title:

LANDSCAPE NOTES
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

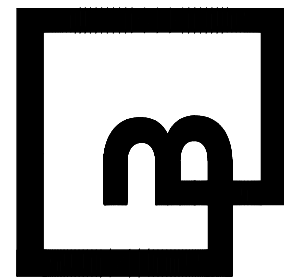
For:
CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107



Scale:
Horizontal
Vertical N/A

Designed TR
Drawn TR
Checked JMW
Approved JMW
Date 10/06/19

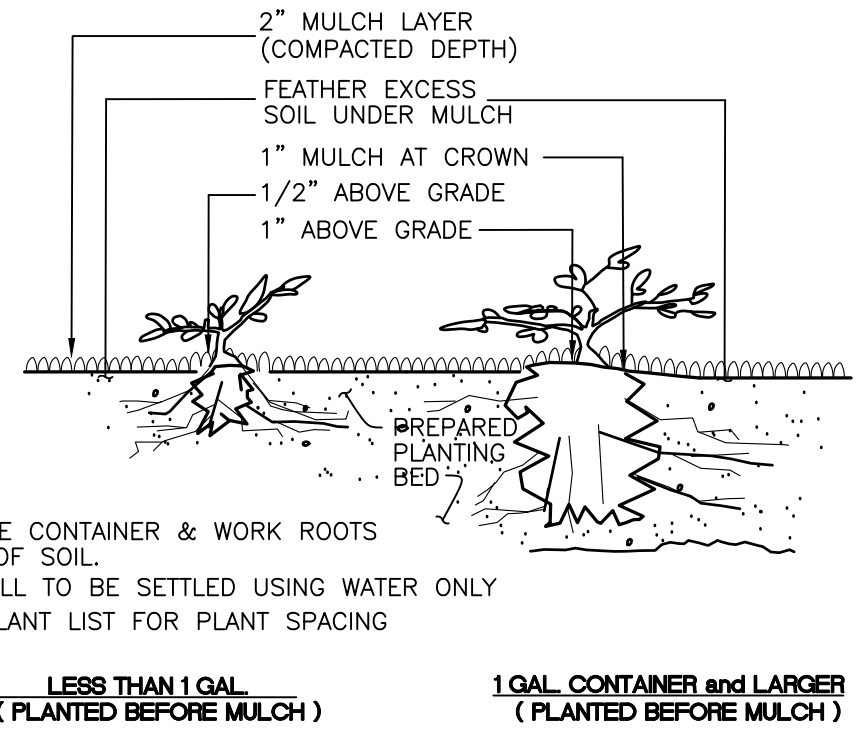
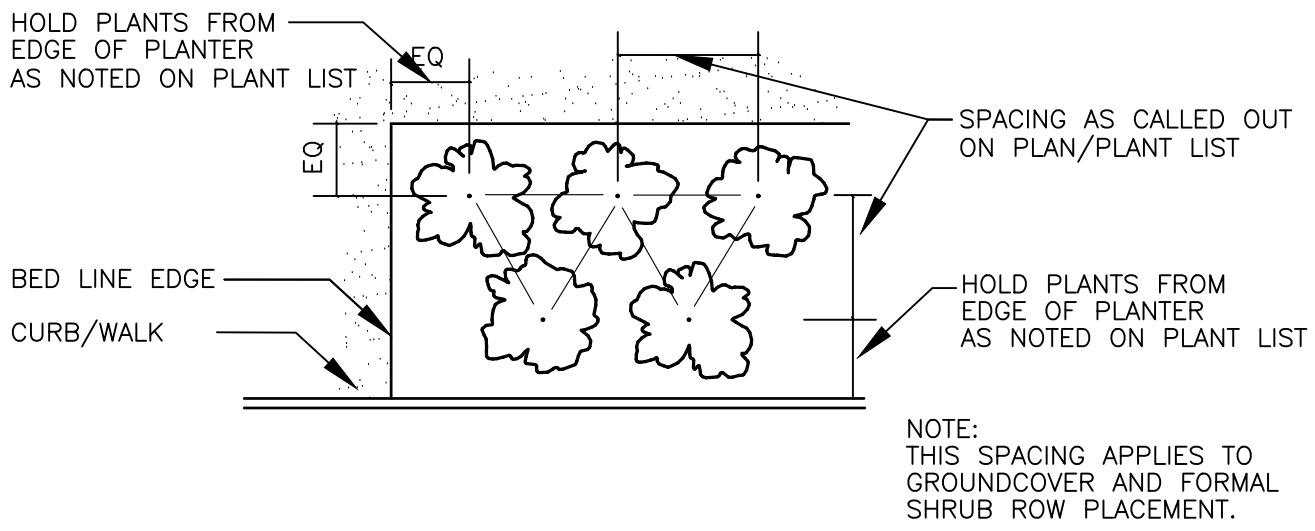
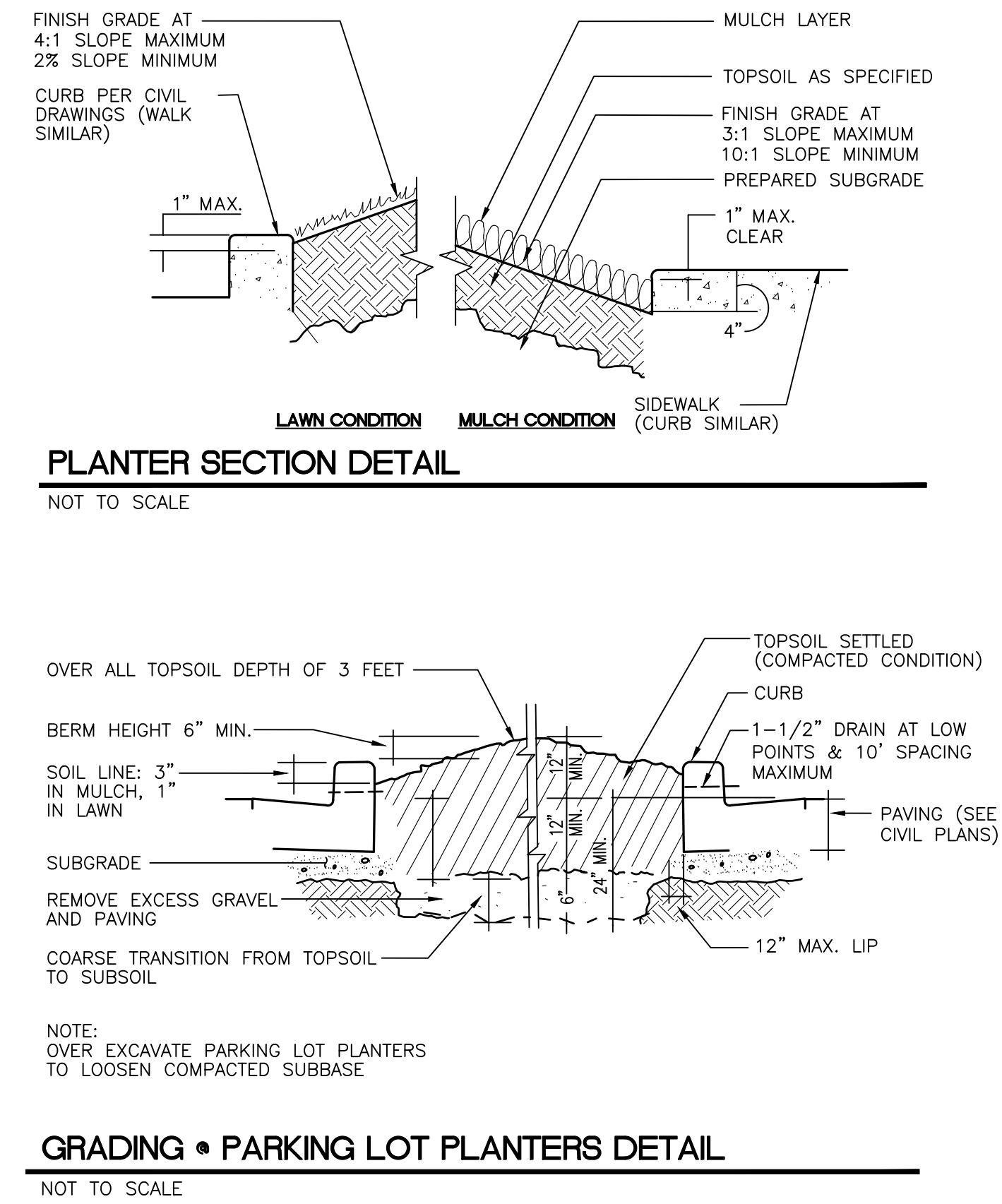
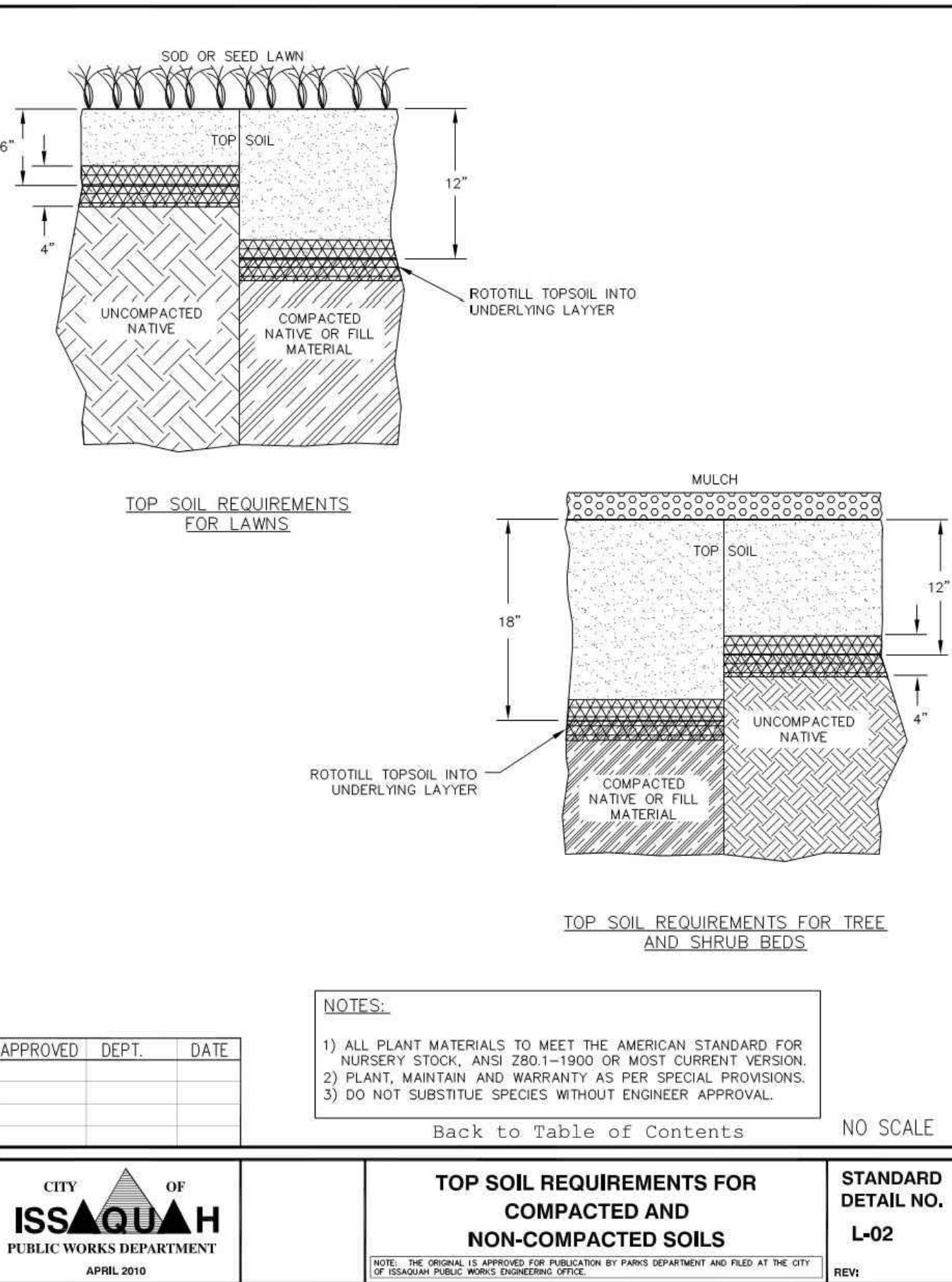
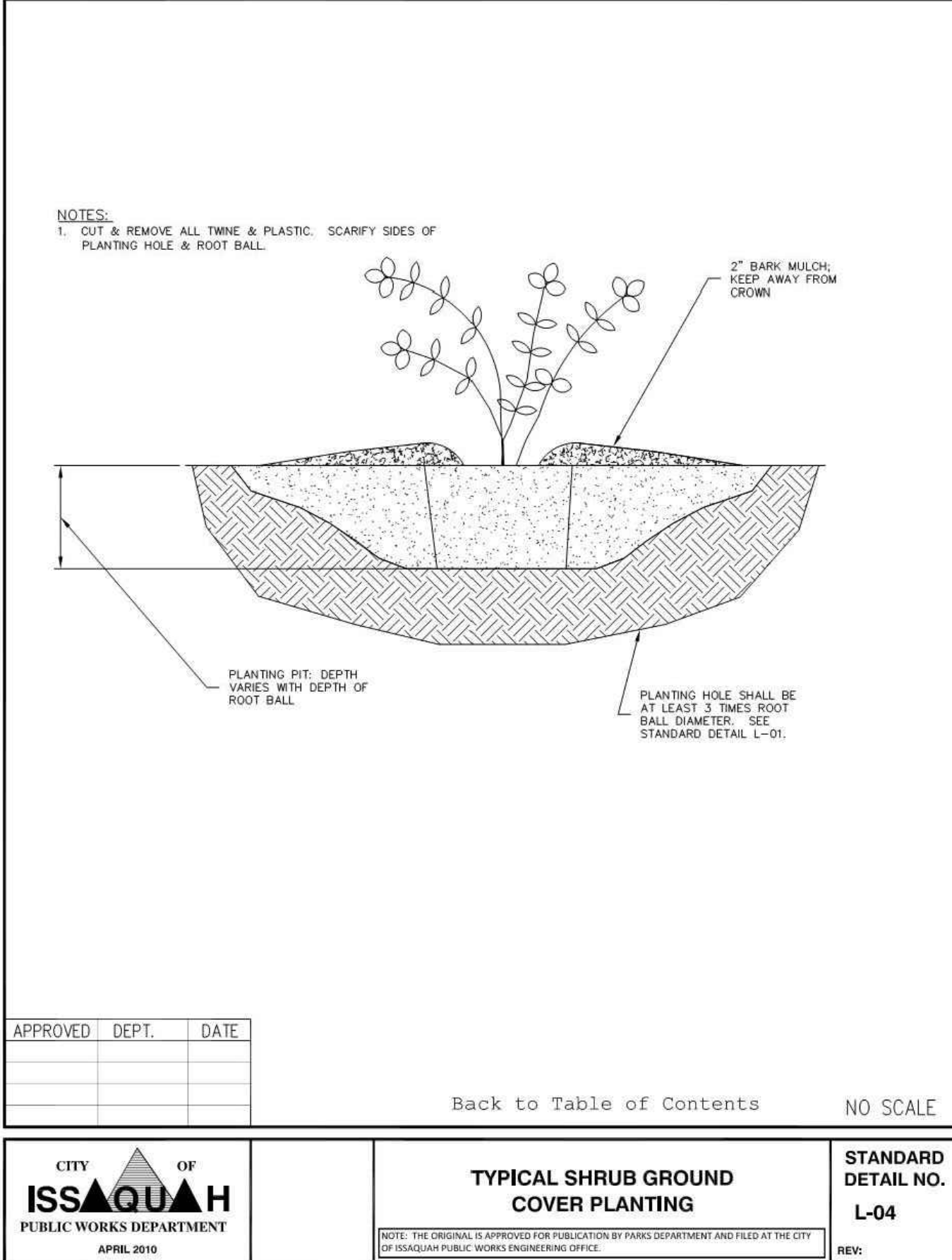
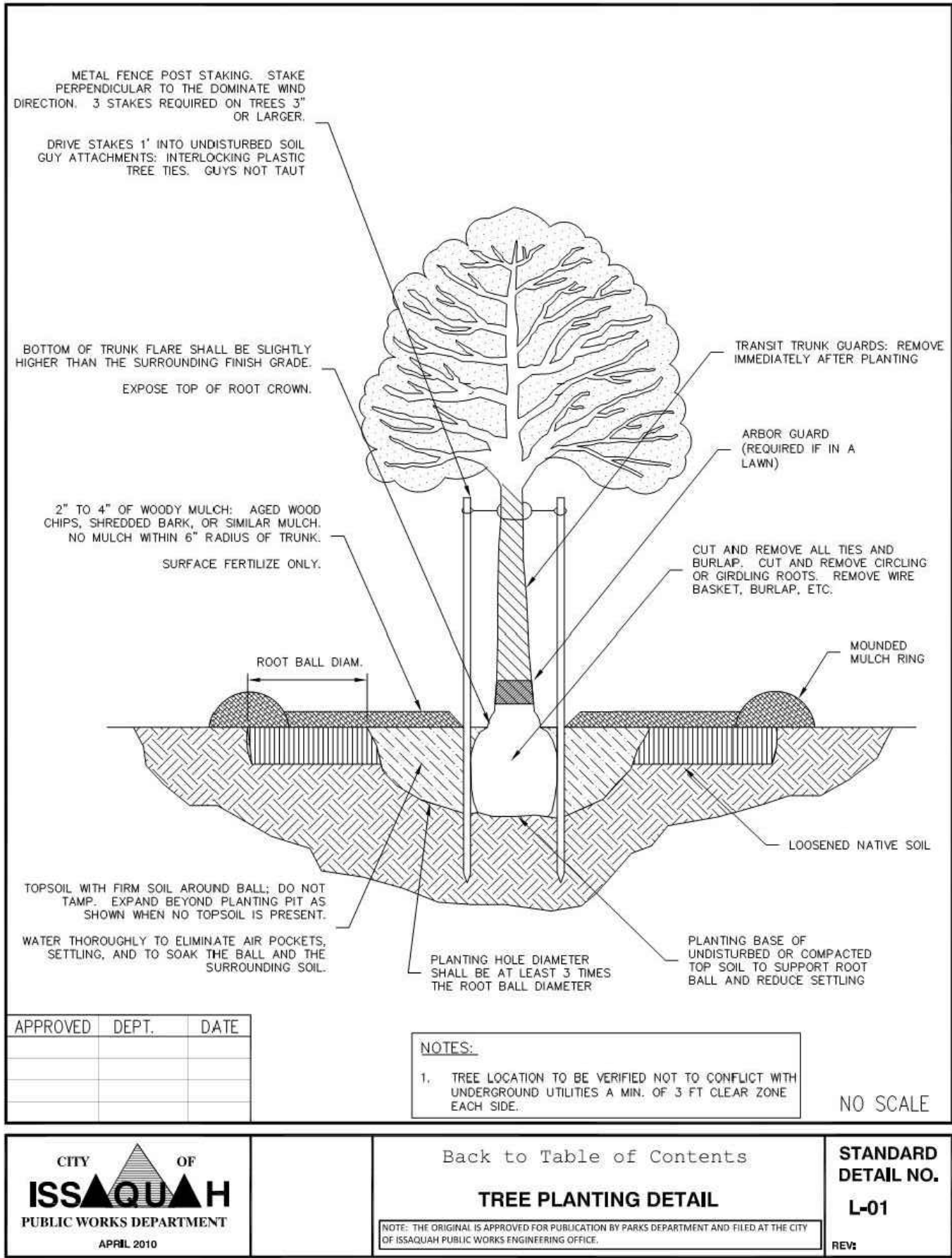
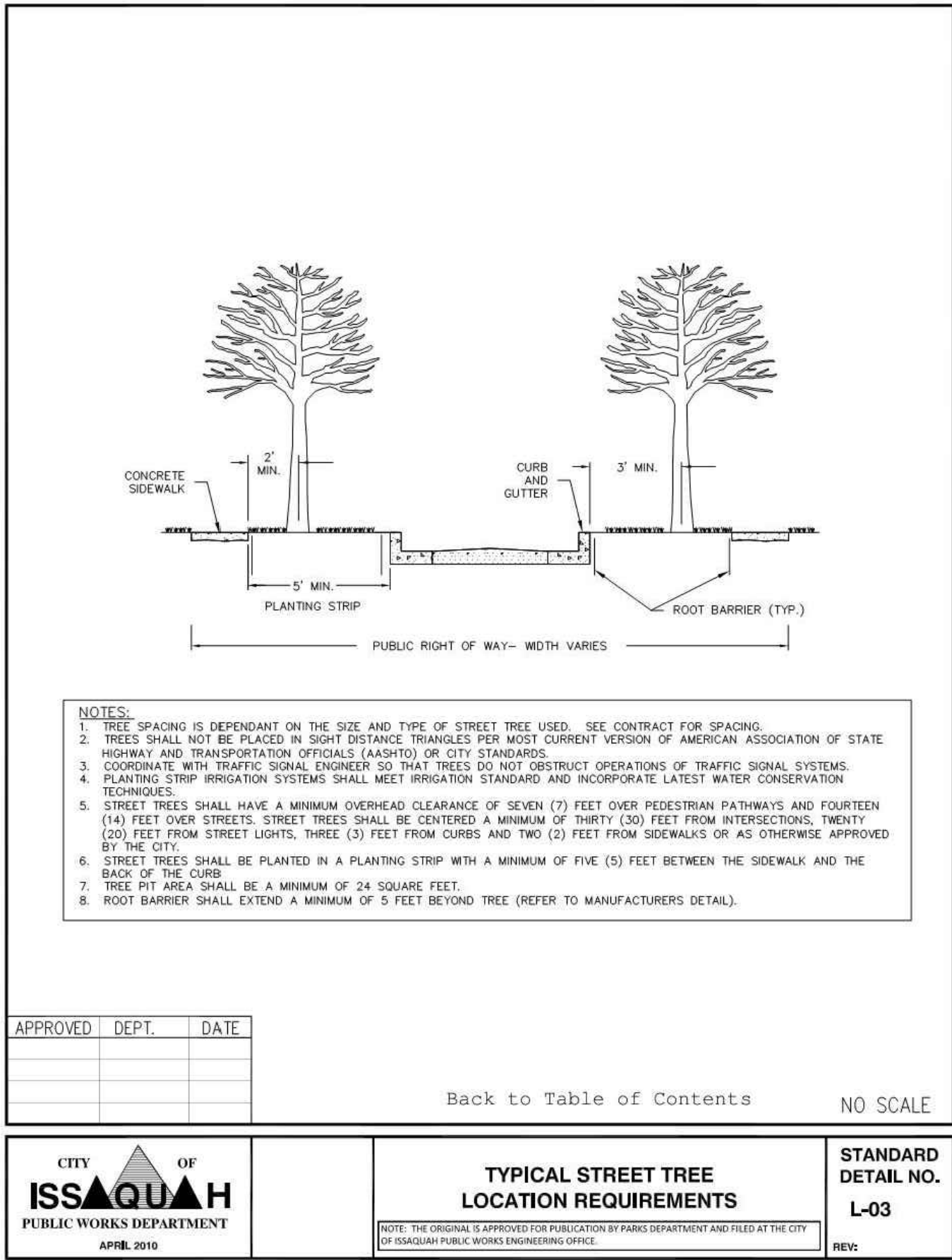
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barghausen.com



Job Number
20693

Sheet
L2 of 6

LANDSCAPE DETAILS
FOR
BROWN BEAR CAR WASH
SE ¼ OF NE ¼ OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



UTILITY CONFLICT NOTE:

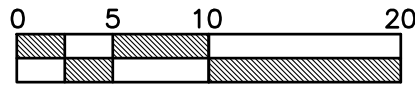
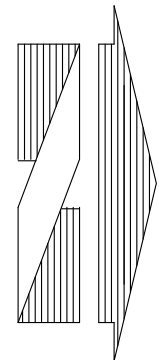
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

PRELIMINARY IRRIGATION PLAN

FOR

BROWN BEAR CAR WASH

SE 1/4 OF NE 1/4 OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON



IRRIGATION POINT OF CONNECTION UTILIZING
EXISTING 1" WATER METER

1ST AVE NW

P.O.C.

IRRIGATION SCHEDULE

SYMBOL

DRIP EMITTER



HUNTER LANDSCAPE DRIPLINE COMPONENTS WITH HUNTER COMPRESSION FITTINGS AND ADAPTERS
ICZ-101-LF WITH 40 PSI PRESSURE REGULATOR
PLD-04-18-250 DRIP EMITTER TUBING 0.40 GALLONS PER HOUR FLOW, EMITTERS 18" O.C.
AIR/VACUUM RELIEF VALVE KIT, IN VALVE BOX
GALVANIZED TIE-DOWN STAKES, AT 3' ON CENTER

SYMBOL



DRIP IRRIGATION: HUNTER ICZ-101-LF VALVE, ONE VALVE PER BOX

P.O.C.



WILKINS 950 XLT- 1.5" DOUBLE CHECK VALVE (STATE APPROVED); TEST AND CERTIFICATION BY LICENSED BACKFLOW TESTER
WILKINS 850 - BALL VALVE, SIZE TO MATCH PIPE
CARSON INDUSTRIES #1730 (TWO AT P.O.C.) GRADE LEVEL VAULT WITH BOLT LOCK LID



HUNTER RAIN-CLICK WIRED SENSOR. INSTALL AT A LOCATION EXPOSED TO WEATHER



HUNTER PRO-C IRRIGATION CONTROLLER IN STAINLESS STEEL CABINET MOUNTED TO EXTERIOR WALL. COORDINATE LOCATION WITH GENERAL CONTRACTOR AND ELECTRICIAN



PLASTIC BALL VALVE, MATCH LINE SIZE, IN VALVE BOX



HUNTER HQ-33LRC 3/4" QUICK COUPLING VALVE, IN VALVE BOX, PROVIDE TWO KEYS AND SWIVELS

MAINLINE - SCH 40 PVC (18" COVER); SIZE PER PLAN, 1-1/2" SIZE MINIMUM

LATERAL - SCH 40 PVC (12" COVER); SIZE PER PLAN, 3/4" SIZE MINIMUM

SLEEVE - CLASS 200 PVC; 4" SIZE AND 18" MINIMUM COVER IN LANDSCAPE AREAS, 6" SIZE AND 24" MINIMUM COVER AT VEHICLE CROSSINGS

SCH 40 PIPE SIZING CHART

PIPE SIZE	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	
FLOW GPM	1-8	8.1-13	13.1-23	23.1-32	32.1-53	53.1-74	GPM (MAX.)

ALL IRRIGATION CONNECTIONS AND FITTINGS SHALL BE LEAD-FREE

IRRIGATION SHOWN DIAGRAMATICALLY FOR PLAN CLARITY. COMMON TRENCH AND PLACE EQUIPMENT IN LANDSCAPE; MANIFOLD GROUPED VALVES IN ADJACENT SHRUB AREAS WHERE FEASIBLE.

MOUNT CONTROLLER ON EXTERIOR WALL. INPUT: 117VAC +/-10%, 60Hz. OUTPUT: 26.5 VAC, 1.5 A. INSTALL 1" DIAMETER PVC CONDUIT FOR 24V ELECTRICAL WIRING FROM THE CONTROLLER TO LANDSCAPE AREA. PAINT CONDUIT TO MATCH BUILDING COLOR.

MOUNT RAIN SENSOR ON WEATHER EXPOSED PORTION OF EXTERIOR WALL AT 8' - 9' HEIGHT.

1ST PL NW

1ST PL NW

UTILITY CONFLICT NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL NOTIFY BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

Revision
No. Date By Appr.
10/06/2020 TJS

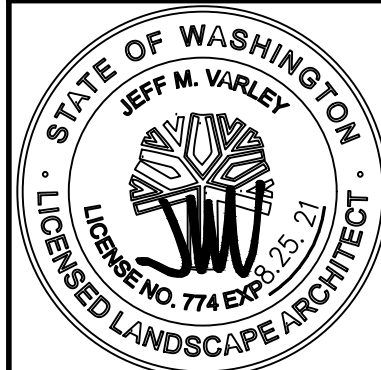
REVISION PER COMMENTS

Title:

PRELIMINARY IRRIGATION PLAN
BROWN BEAR CAR WASH
55 NW GILMAN BLVD.
ISSAQUAH, WA

For:

CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107



Scale:

Horizontal

Vertical

N/A

Designed TR

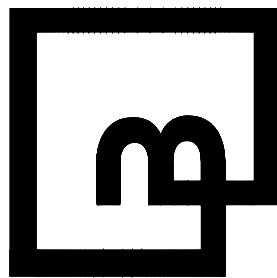
Drawn TR

Checked JMW

Approved JMW

Date 10/06/19

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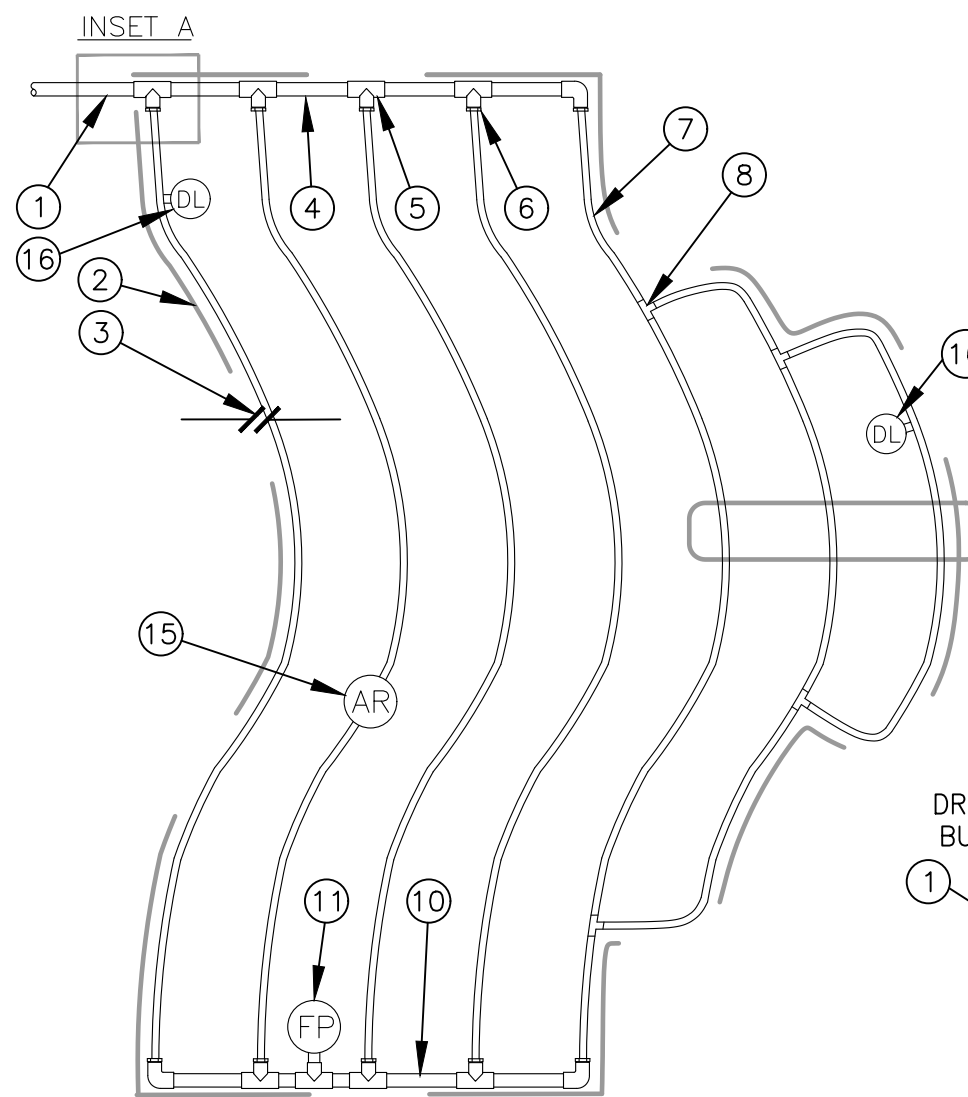
Job Number

20693

Sheet

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IRRIGATION DETAILS
FOR
BROWN BEAR CAR WASH
SE ¼ OF NE ¼ OF SEC. 28, TWN. 24 N, RGE. 6 E, W.M.
CITY OF ISSAQUAH, KING COUNTY, WASHINGTON

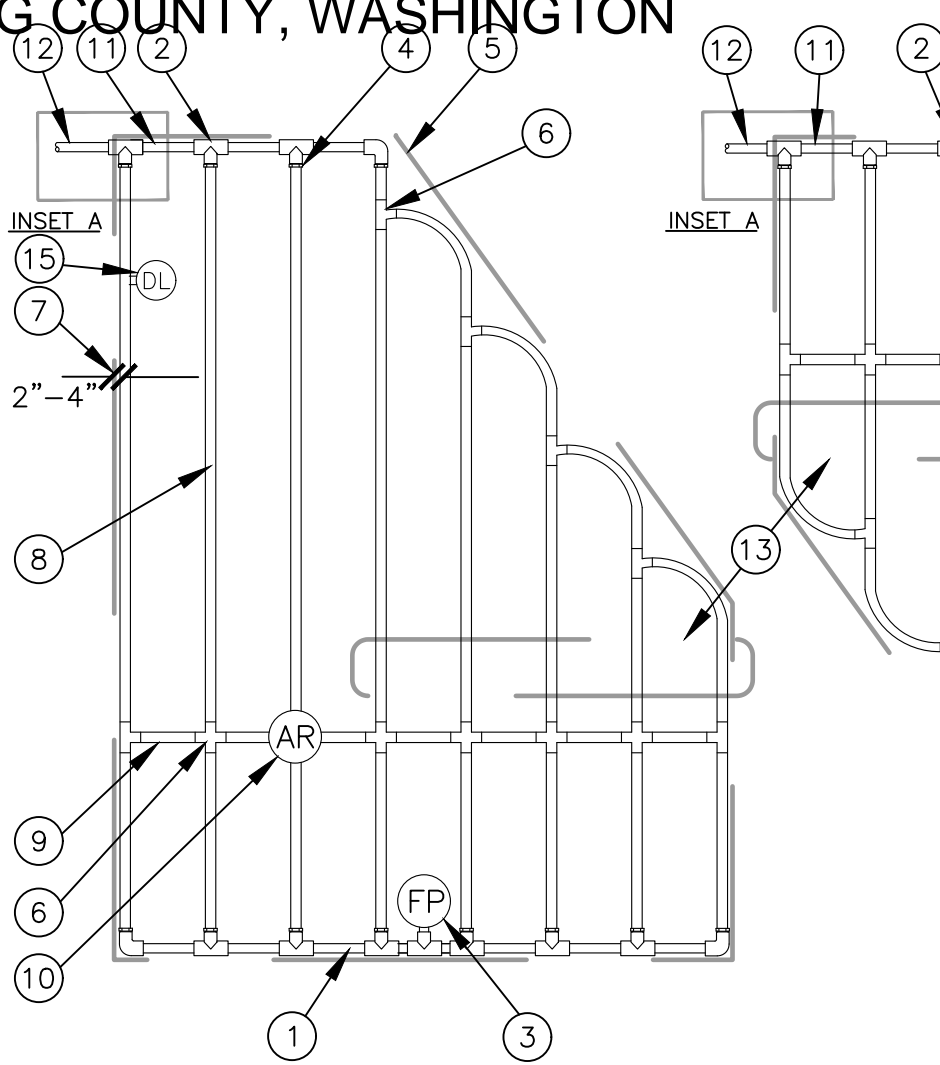


NOTES:

1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.
3. INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
4. WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

- 1 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 2 PERIMETER OF AREA
- 3 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 4 PVC SUPPLY MANIFOLD
- 5 PVC SCH 40 TEE OR EL (TYPICAL)
- 6 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 7 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE

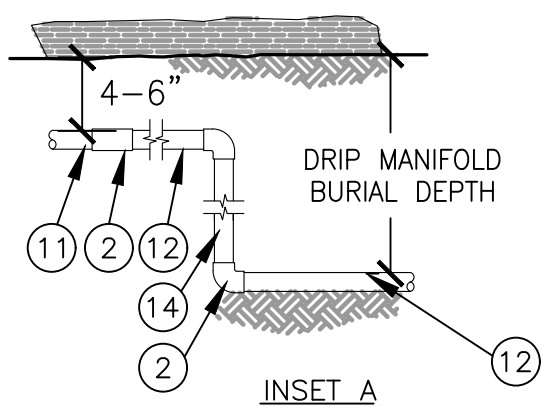
- 8 ARB X BARB INSERT TEE: RAIN BIRD XFF-TEE (TYPICAL)
- 9 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
- 10 PVC FLUSH HEADER
- 11 FLUSH POINT: SEE RAIN BIRD XFS DETAILS FOR FLUSH POINT INSTALLATION
- 12 PVC RISER PIPE
- 13 TURF OR MULCH
- 14 FINISH GRADE
- 15 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
- 16 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO



- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFS FLUSH POINT" OR "XFS FLUSH POINT WITH BALL VALVE"
- 4 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 5 PERIMETER OF AREA
- 6 BARB X BARB INSERT TEE OR CROSS: RAIN BIRD XFF-TEE OR RAIN BIRD XFD-CROSS (TYPICAL)
- 7 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 8 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE
- 9 RAIN BIRD XF SERIES BLANK TUBING
- 10 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
- 11 PVC SUPPLY MANIFOLD
- 12 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 13 TOTAL LENGTH OF SELECTED DRIPLINE SHOULD NOT EXCEED LENGTH SHOWN IN TABLE
- 14 PVC SCH 40 RISER PIPE
- 15 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

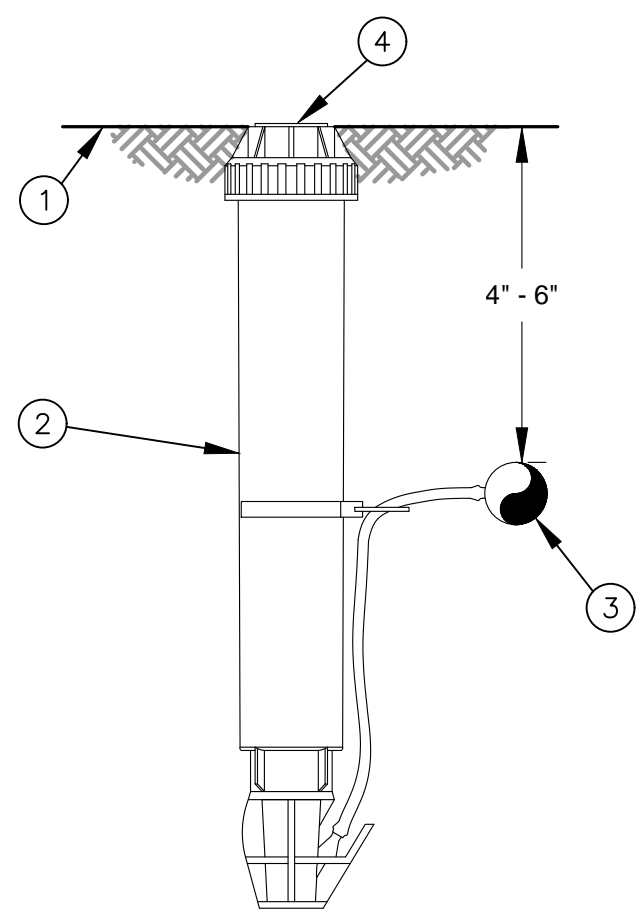
NOTES:

- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFS DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
- LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
- AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
- WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DRIPLINE ODD CURVES LAYOUT

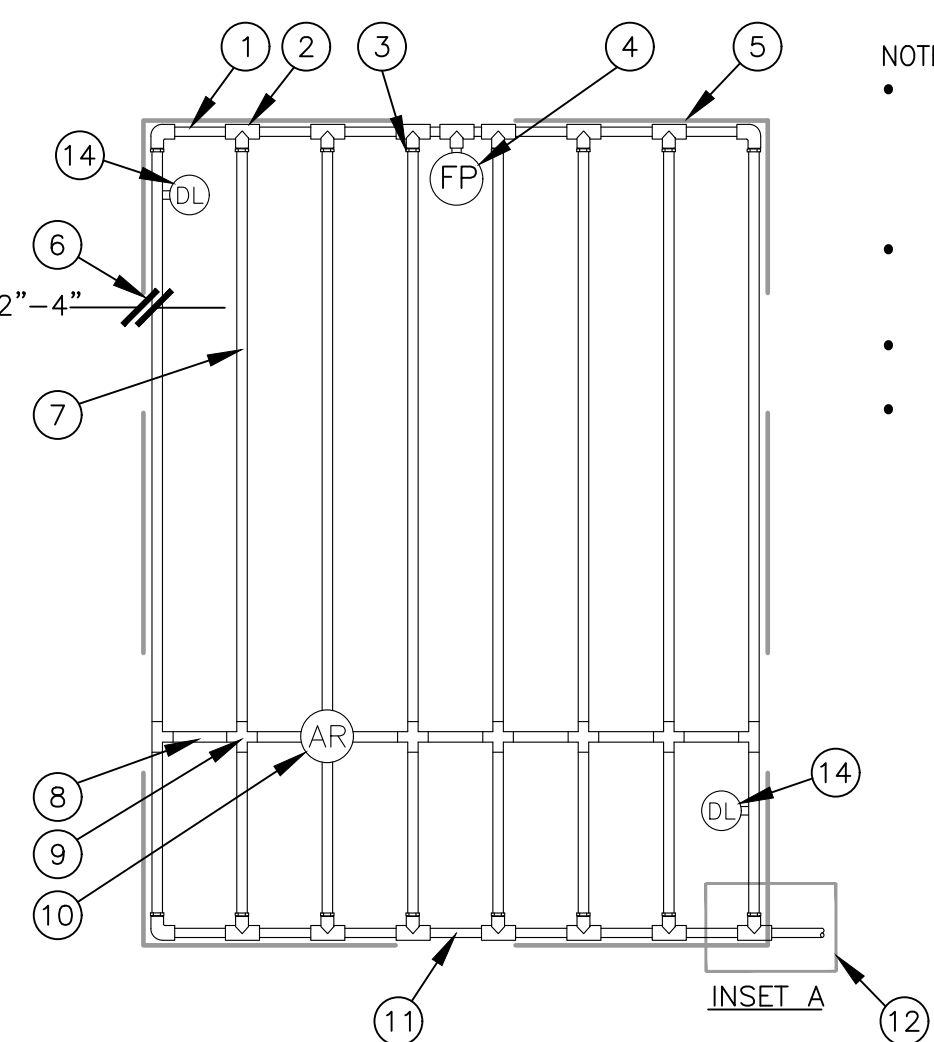
NOT TO SCALE



- 1 FINISH GRADE/TURF
- 2 OPERATION INDICATOR RAIN BIRD MODEL: OPERIND
- 3 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE
- 4 PURPLE CAP TO INDICATE NON-POTABLE WATER

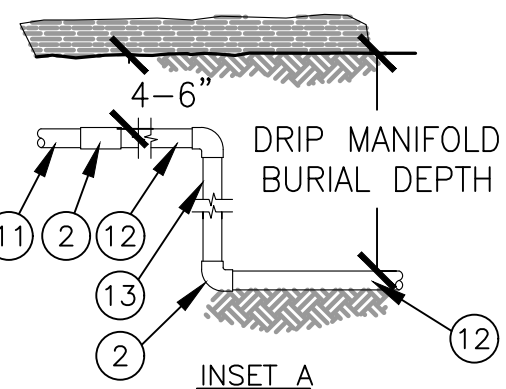
- NOTE:
1. INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
 2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO 1/4 PATTERN. THE FLOW FROM THE NOZZLE, 0.3 GPM, SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.

DRIP IRRIGATION DRIPLINE INDICATOR



NOTES:

- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XFS DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
- LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
- AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
- WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.



DRIPLINE END FEED LAYOUT

NOT TO SCALE

DRIPLINE SLOPED LAYOUT

NOT TO SCALE

- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 4 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFS FLUSH POINT" OR "XFS FLUSH POINT WITH BALL VALVE"
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE
- 8 RAIN BIRD XF SERIES BLANK TUBING
- 9 BARB X BARB INSERT TEE OR CROSS: RAIN BIRD XFF-TEE OR RAIN BIRD XFD-CROSS (TYPICAL)
- 10 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
- 11 PVC SUPPLY HEADER
- 12 PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 13 PVC SCH 40 RISER PIPE
- 14 DRIPLINE INDICATOR. SEE DETAIL FOR ADD'L INFO

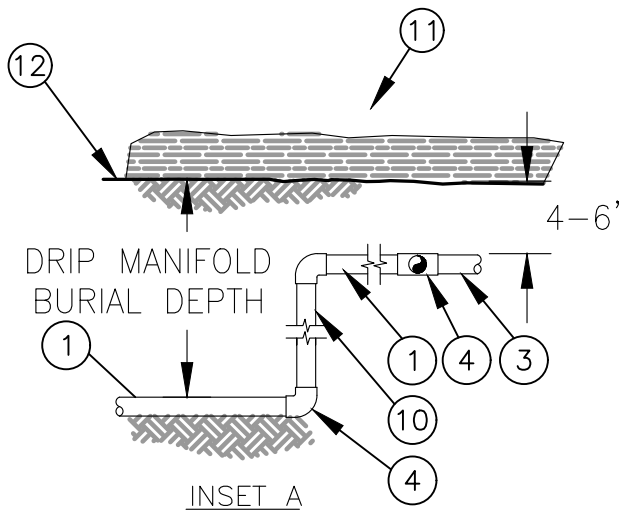
XFS Dripline Maximum Lateral Lengths (Feet)						
Inlet Pressure (psi)	12" Spacing		18" Spacing		24" Spacing	
	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)	Nominal Flow (gph)
15	273	155	314	250	424	322
20	318	169	353	294	508	368
30	360	230	413	350	586	414
40	395	255	465	402	652	474
50	417	285	528	420	720	488
60	460	290	596	455	780	514

DRIPLINE IRREGULAR SHAPED LAYOUT

NOT TO SCALE

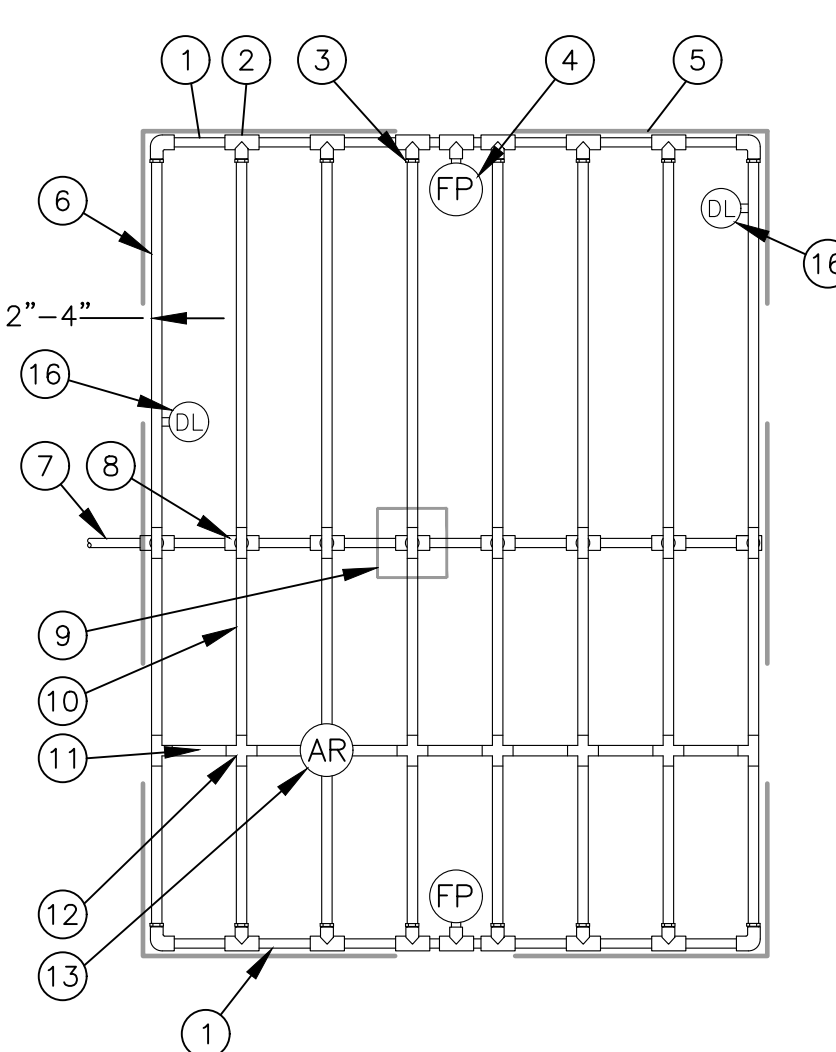
NOTES:

- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. DISTANCE BETWEEN LATERAL ROWS FOR BOTTOM 1/3 OF SLOPE TO BE SPACED GREATER THAN OPTIMAL ROW DISTANCE. SEE RAIN BIRD XFD DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACING.
- LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
- WHEN ELEVATION CHANGE EXCEEDS 8 FEET IT IS RECOMMENDED THAT A NEW DRIPLINE ZONE BE CREATED.
- INSTALL AIR RELIEF VALVE AT HIGH POINTS IN DRIP LATERAL.
- WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

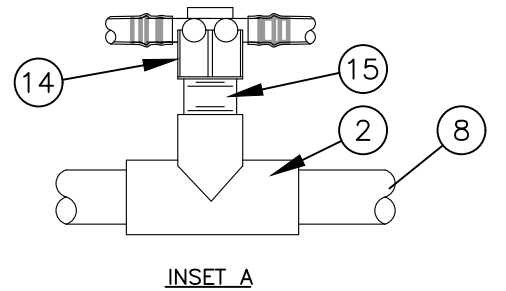


- 1 PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 2 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 3 PVC SUPPLY HEADER
- 4 PVC SCH 40 TEE OR EL (TYPICAL)
- 5 SUB-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFS DRIPLINE NON-POTABLE: XFSP DRIPLINE
- 6 FLUSH POINT: SEE RAIN BIRD XFS DETAILS FOR FLUSH POINT INSTALLATION
- 7 PVC FLUSH HEADER
- 8 1/2" AIR RELIEF VALVE: RAIN BIRD MODEL: ARV050 SEE RAIN BIRD XFS DETAILS FOR AIR RELIEF INSTALLATION
- 9 DRIPLINE INDICATOR. SEE DETAIL FOR ADDITIONAL INFORMATION

- 10 PVC RISER PIPE
- 11 TURF OR MULCH
- 12 FINISH GRADE



- 1 PVC EXHAUST HEADER
- 2 PVC SCH 40 TEE OR EL (TYPICAL)
- 3 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 4 FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFS FLUSH POINT" OR "XFS FLUSH POINT WITH BALL VALVE"
- 5 PERIMETER OF AREA
- 6 PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
- 7 PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 8 PVC SUPPLY MANIFOLD
- 9 CONNECTION FROM SUPPLY MANIFOLD TO DRIPLINE (TYPICAL)- SEE INSET A



NOTES:

- DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE RAIN BIRD XF-SOI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.
- LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM LENGTH SHOWN IN THE ACCOMPANYING TABLE.
- AIR RELIEF VALVE TO BE INSTALLED AT HIGH POINT OF AREA.
- WHEN USING 17MM INSERT FITTINGS WITH DESIGN PRESSURE OVER 50PSI, IT IS RECOMMENDED THAT STAINLESS STEEL CLAMPS BE INSTALLED ON EACH FITTING.

DRIPLINE CENTER FEED LAYOUT

NOT TO SCALE

Revision
No. Date By Cdd. Appr.

REVISED PER COMMENTS

Title:

CAR WASH ENTERPRISES, INC.
3977 LEARY WAY NW
SEATTLE, WASHINGTON 98107

For:



Scale:

Horizontal

Vertical

N.A.

Designed: TR

Drawn: TR

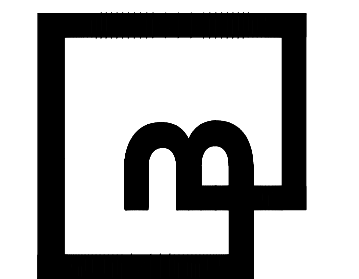
Checked: JMW

Approved: JMW

Date: 10/06/19

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Job Number

20693

Sheet

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